Residential relocation and personal networks of older Dutch adults

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B.A. Bloem

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Residential relocation and personal networks of older Dutch adults

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door

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Chapter 1

Introduction

They say you should never move an old tree. And indeed, the elderly tend to view moving as an extremely trying experience. Apart from the problem of finding adequate housing, it can represent the final phase in their lives, something they would rather not think about. It means giving up their home and if they are moving far away, it means leaving the familiar surroundings and saying goodbye to many of the people they see every day. Moving to a residential care facility or nursing home also means losing autonomy and being confronted with a situation that might not offer the comfort and care they are used to. So it is not surprising that the mobility rate of people over 55 years of age is about 4%, two thirds lower than the general population's, which has been around 10%. The mobility rates have been stable for years (Statistics Netherlands, 2012). Over the adult life course, there is less and less of a tendency to move. After people find a permanent job and start a family, they become more attached to their home and in later life they tend to remain in the same home and neighborhood as long as they can. Many even stay put long past the moment when their home and environment cease to fit their needs. Although this can result in social isolation and loneliness, most older people want to age in place

The Dutch policy is to help people stay in their home and continue living independently as long as possible (Council for Housing, City Planning and the Environment, 2005). The Dutch state helps prolong independent living by subsidizing grocery delivery services, meals-on-wheels, special transportation, house cleaning, home improvements and so forth. There are nursing homes for elderly people with severe health problems and multifarious care facilities ranging from day care and short-stay homes to apartments with special services or adaptations. This policy is financially preferable, since living independently is usually seen as less expensive than living at a care setting. As a result of this policy as well as their own preferences, people who move to a care setting late in life have a large care need and leave behind a network of informal and formal care-givers.

Although the health of many older people declines later in life, the general population of older adults is quite healthy and able to live independently without that much care or assistance. To all, it is of great importance for their well-being whether they move and if so, what area and type of home they move into. This is why the main research question in the current study is: *What are the antecedents of the residential relocation of older Dutch adults and what are the social consequences?* Since we know little about these antecedents, we examine older Dutch adults' life course events in relation to various types of moves. We know even less about the social consequences of moving. In addition, we examine the consequences of moving as regards the size and composition of the older adults' personal networks and their feelings of loneliness.

The domain of our research is shown in Figure 1 below.

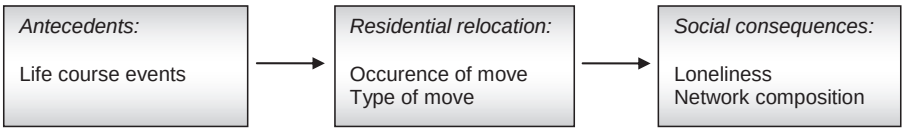

Figure 1. Research question: Antecedents and social consequences of residential relocation

In the next paragraphs we outline the research conducted on each of the associations in the figure.

Antecedents of moving

Regarding antecedents of moving, we draw upon the life course perspective of Elder (1994). The life course is defined as "a sequence of socially defined events and roles that the individual enacts over time" (Giele & Elder, 1998, p. 22). It is not necessary for specific events and roles to proceed in a given sequence – not everyone experiences all the events or holds all the roles. For example, starting a household with a partner is often a reason to move, but not everyone has children and the housing trajectories differ for each individual. Older movers may go through age-graded transitions, and depending on the positions they hold (e.g. jobs), moves might follow specific life course events (e.g. retirement). Rossi (1955) laid the foundation for a life course perspective on moving based on the assumption that people often move in the context of specific life course events such as marriage, job changes and children leaving home. The application of this perspective led Litwak and Longino (1987) to develop a framework for late life moving, implying that individual destinations are determined at least partly by people's position in the life course.

Particularly in the United States, research has focused on parts of this framework. Most of the research concentrated on the effects of retirement and health aspects on relocation. Applying a longitudinal design, as is rarely done (Walters, 2002; Sergeant, 2008), we studied the cumulative influence of life course events and several conditions on moving decisions later in life. The dynamic life course approaches of Elder (1985) and Mulder and Hooimeijer (1999) emphasize the interaction between events and conditions in various life domains. Our first set of research questions is: *Are moves triggered by late life changes in the family, employment, home and health domains? Is there an accumulation of late life changes and conditions in one or more life domains that affects the probability of a specific move?*

Social consequences of moving

Previous studies on residential mobility often start from the premise that relocation has negative effects such as depression (Bradley & Van Willigen, 2010), high rates of mortality (Boyle, 2004), or changes in the immune system, such as fewer natural killer cells (Lutgendorf et al., 2001). Our starting point is positive. We assume that older adults improve their home environment by moving and are flexible enough to deal with the changes afterwards. The model of Lawton (1989) includes these assumptions, stating that functional capacities (health) of older adults need to be in balance with their living environment. In the event of an imbalance, older adults can alter their living environment by moving to housing better suited to their present condition, such as a care setting. A successful adaptation depends on the extent to which the move creates a better balance between an individual's capacities and environmental demands.

A balance between individuals' functional capacities and the living environment enables them to maintain their personal network. The personal network includes everyone they interact with regularly and have close ties with. This network of relationships is a major mediating structure and provides cohesion, feelings of belonging and protection from loneliness (De Jong Gierveld, Van Tilburg, & Dykstra, 2006). To examine whether moving might be beneficial to individuals' well-being, we formulate our second set of research questions as: *Do older people with health problems who move to adapted housing have a larger personal network than older people who do not move? Do they also have the advantage of being less lonely?*

Our second theoretical perspective for studying the social consequences of moving is drawn from a life course framework focused on changes in personal networks: the *convoy model* of Kahn and Antonucci (1980). The theory does not assign an a priori value to relocation. Instead it evaluates older adults' outcomes after a change such as relocation in terms of the fit between their needs and the available relationships in their personal network. The model conceptualizes individuals as surrounded by a convoy of persons they have had relationships with from early childhood to old age. During the life course, some relationships end as a result of life course events, new ones enter the personal network, and others last a lifetime. The model differentiates *core* and *role* partial networks, the former referring to strong ties (relatives, friends) and the latter to weak ones (neighbors, members of the same organization). Although there are differences in closeness and frequency of interaction between these types of ties, each has its own qualities. They differ in the extent of stability, with the role networks most subject to change. The susceptibility of various types of role relationships to change is assumed to vary with three characteristics, the extent to which they are linked to the neighborhood, start more or less voluntarily, and represent an exchange that is

more or less instrumental. The third research question is: *To what extent do various types of role relationships end or continue when older people move, and are new role relationships initiated after the move?* Barely any attention has however been devoted to changes in these role networks in previous studies.

Lastly, we study new neighbor relationships after a move, since these relationships are hypothesized as being vulnerable when people move and neighbors serve important and specific functions for older people. After a move, neighbors can provide information about the new neighborhood or assistance with small matters, and later on provide contacts and support in the event of health problems (Litwak & Szelenyi, 1969; Unger & Wandersman, 1985). Studying the development of new neighbor relationships starts with the observation that people spend most of their time in specific places such as neighborhoods. Settings like this are not designed to be a meeting ground, they are institutionally designed to serve other functions in life. However, these settings often provide opportunities for social contact (Kalmijn & Flap, 2001). Since individuals differ along an almost infinite number of dimensions, relationship formation is not a straightforward process. Personal and contextual factors probably play a role and condition the opportunities to initiate and maintain neighbor relationships. Previous studies focused on groups other than older adults and given the importance of neighbors to older adults, our fourth research question is: *Which conditions are expected to be helpful in starting new neighbor relationships after moving at an older age?*

Research design and data

To examine the antecedents and social consequences of residential relocation in later life, data are used from the *Longitudinal Aging Study Amsterdam* or LASA (Huisman et al., 2011). The LASA sample was initially recruited for the *Living Arrangements and Social Networks (LSN) of Older Adults* research program (Knipscheer, De Jong Gierveld, Van Tilburg, & Dykstra, 1995). LSN and LASA describe the Dutch population above the age of 55 and started in 1992 with a data collection among a representative stratified random sample of men and women born between 1908 and 1937. The sample was drawn from population registers of eleven municipalities, that is the city of Amsterdam and two rural communities in the west of the Netherlands, one city and two rural communities in the south, and one city and four rural communities in the east. These regions represented the differences in religion and urbanization in the Netherlands at the time. For T0, the first observation in 1992 (N = 3,805), the cooperation rate was 62%. Follow-ups were carried out in 1992-1993 (T1, N = 3,107), 1995-1996 (T2, N = 2,545), 1998-1999 (T3, N = 2,076), 2001-2002 (T4, N = 1,691),

2005-2006 (T5, N = 1,047), 2008-2009 (T6, N = 985), and – still in progress – 2011-2012 (T7). In 2002, LASA sampled a new cohort (birth years 1938-1947, referred to here as T4, N = 1,002) from the same sampling frame as the earlier cohort, with a cooperation rate of 62%. Follow-ups were carried out in 2005-2006 (T5, N = 861), 2008-2009 (T6, N = 766), and 2011-2012 (T7).

To answer the research questions, various subsets of respondents and observations were selected. For the first research question, we selected respondents living independently at T1 with at least one follow-up observation available. Each of the subsequently selected movers was matched to two respondents who did not move and were similar in their sex, age and year of observation. For the second research question, we selected respondents in poor health and examined whether they moved in the course of the longitudinal study. For the third research question, we selected a sample of respondents who moved to independent housing from the observations T2 to T4. We matched movers and non-movers in much the same way as in the first research question. For the fourth research question, the approach was slightly different. We selected from T1 to T6 a sample of respondents who moved to independent housing to analyse the pre-move and post-move observation, and randomly selected a set of two consecutive observations of non-movers. As a result of the stratified sample, the number of males and females in the various studies were about equal. The ages of the respondents in all the studies ranged from 55 to 93.

Outline of the study

The first question pertaining to the influence of later life events on residential mobility is addressed in Chapter 2. We studied the effect of triggers in various life domains on specific moves as distinguished by Litwak and Longino (1987). We also studied the effects of an accumulation of triggers and conditions in one or more life domains on specific moves with the framework specified by Mulder and Hooimeijer (1999). This chapter addresses the antecedents of moving (Figure 2). The other chapters each address specific social consequences of moving. The second research question, whether older Dutch adults are less lonely after moving, is addressed in Chapter 3. Using Lawton's (1989) ecological model of aging, in this study we examined the extent to which relocation affected personal networks and feelings of loneliness. Chapter 4 continues with an examination of changes in older Dutch adults' role networks after moving. With the convoy model (Kahn & Antonucci, 1980), we examined the differential impact of relocation, depending on the distance moved, on the size of three types of role networks. The fourth research question pertaining to starting relationships with neighbors after a move is addressed in Chapter 5. We examined eight personal and

contextual conditions associated with starting new relationships with neighbors after short and long-distance moves. After the four empirical chapters, in Chapter 6 we summarize the most important findings and draw some general conclusions. The final chapter also raises several points of discussion.

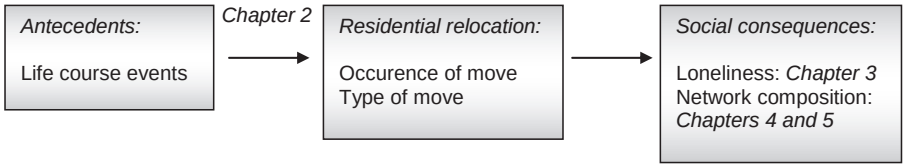

Figure 2. Outline of the study

Chapter 2

Residential mobility in older Dutch adults: Influence of later life events

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Abstract

In this study, we examined life course events of older Dutch adults in relation to three types of moves and the moving distance. Using the frameworks developed by Litwak and Longino (1987) and Mulder and Hooimeijer (1999), we stipulated life events or triggers and conditions in various life domains. We selected a total of 1,160 men and 1,321 women (aged 54 to 91) from the Longitudinal Aging Study Amsterdam. We conducted multinomial logistic regression analyses to predict moves to a residential care facility, adapted housing or regular housing and to predict the moving distance. Retirement, an empty nest, widowhood and a decline in health each triggered specific moves. In additional analyses, the effects of triggers, especially health changes, were moderated by conditions. There is no indication of a specific trajectory of moves associated with consecutive life events, as suggested by Litwak and Longino. By combining triggers and conditions, however, the framework developed by Mulder and Hooimeijer allows for a more valid analysis.

Introduction

Moves are recognized as influential life course events. They often occur in the context of other life events, such as job, marital status or family size changes (Schachter, 2001). The life events and other conditions in people's lives put demands on their future housing. For example, getting married and having children often trigger a need for more space (Clark & Huang, 2003). The purpose of the present study is to explore how events in later life contribute to various types of moves in older Dutch adults. Although distinctive types of moves such as retirement migration or institutionalization have been researched in a life course context, a broader theoretical and empirical understanding of the trajectories in later life leading to various residential moves is called for.

Research into later-life migration often starts from the life course framework developed by Litwak and Longino (1987), which has distinguished three types of moves following various events in the lives of older people, i.e. *retirement* moves to a nicer environment after parental or economic duties decrease, *comfort* moves, often to the vicinity of children in the face of moderate disabilities, and *care* moves to a residential care facility due to chronic disabilities. Each type is thought to occur at a successive point in the life course. An attractive feature of this framework is its linkage between life events and specific types of moves. The path to residential mobility can however conceivably be more complex than the framework suggests. People may go through a broader range of life events in various life domains (Elder, 1985). This makes simple associations between specific events and moves less likely.

The framework of residential mobility in the life course developed in the Netherlands by Mulder and Hooimeijer (1999) may help differentiate the effects of life events on residential mobility. It has distinguished between triggers and conditions of moving and, like the Litwak and Longino framework, departs from a life course perspective but assumes an interdependency between various life course domains. It has differentiated between triggers and conditions that may occur in these life domains. A change in one domain can trigger a move. Conditions in other domains may stimulate or restrict the actual move. We distinguished the domains of employment, family, health and the home.

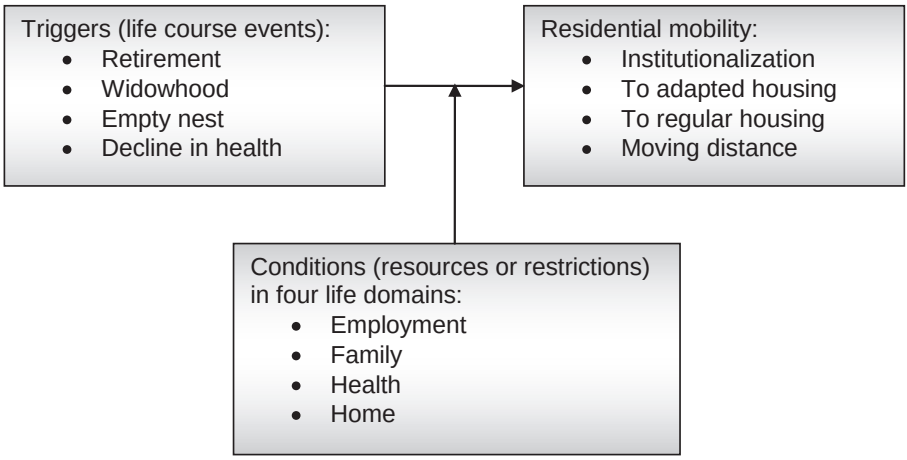

Figure 1. Theoretical framework of residential mobility in the life course

For example, retirement can be seen as a change in the employment domain that may trigger a desire to move to an attractive environment. Whether one actually moves depends on circumstances such as income level or the proximity of children that condition the action of the individual. Residential mobility may be triggered by events in several domains, such as employment and health, resulting in multidimensional trajectories to residential mobility. There is no fundamental classification of triggers and conditions. For example, retirement may serve as a *trigger* to consider moving in one case, and as a *condition* in another case, if moving closer to the children is postponed because one of the parents is still working. The model indicates that the effects of triggers or changes in certain life domains on residential moves are moderated by conditions in other life domains.

Our theoretical discussion has lead to two research questions: (1) What triggers in various life domains affect the probability of moves as distinguished by Litwak and Longino (1987)? (2) Is there an accumulation of triggers and conditions in one or more life domains that affects the probability of a specific move?

Litwak and Longino (1987) have based their classification of moves on the underlying motives (leisure, support and care) as well as the distance to the new location. Since the motives underlying a move are closely related to the triggers, we classified the moves via objective characteristics of the housing at the old and new sites. We distinguished moves to residential care facilities (institutionalization), moves to adapted housing and moves to regular housing. At residential care facilities, care is provided by professionals in a sheltered environment. At adapted housing, homes in the community are equipped with special adaptations. Older adults are expected to

move there in the event of an increased need for support or care, a decline in health or a lack of help from children in the immediate vicinity. Older people who move to regular housing without any special provisions for the elderly or the disabled may have various reasons for doing so, such as leisure activities and wanting to be near their children. In addition to housing characteristics, we classified moves by distance, i.e. in the neighborhood, outside the neighborhood but in the town, and outside the town.

We selected triggers in three life domains. In the employment domain, we identified retirement as a trigger. In the family domain, we identified the last child leaving home and widowhood as triggers. Although the importance of wanting to be near the children is generally acknowledged, very little attention has been devoted to its effects on moving (Walters, 2002). Some researchers show that children who live nearby act as a constraint on moving (De Jong et al., 1995), but we have not found any research on the effect of children leaving home. In the health domain, a decline in health acted as a trigger.

Conditions were selected in four life domains that can serve as triggers in similar or different life domains. We conceived them as resources or restrictions related to the triggers. For example, having children nearby might be a different conditioning situation for individuals in poor health than having children far away, since children living nearby can be of assistance. In the employment domain, the influence of income was addressed. In the family domain, we included the presence of a spouse as a conditioning situation. We also included having children or not, and the distance to the child living nearest. In the health domain, we considered the health status and age of the older adult. The home domain included physical characteristics of the home, home ownership, the attractiveness of the environment and the degree of urbanization as conditions. We generally assume that less favorable conditions promote residential mobility. Retired people, for example, may move to a nicer area to improve their living environment.

Before turning to our empirical sections, we should note that the Dutch housing market is characterized by low mobility. The annual percentage of movers is around 10% of all the households in 2000-2005 (Statistics Netherlands, 2007), as compared to 12% in the United Kingdom and 14% in the United States (Census, Office of National Statistics, 2001; U.S. Census Bureau, 2006). For older movers, the mobility rates are considerably lower and only 1% of Dutch adults above the age of 50 move as compared to 5% in the United States and around 4% in the United Kingdom. One reason for the low mobility is that the Netherlands has a relatively large amount of affordable rental housing for middle-income as well as low-income households. Data of Census, Office of National Statistics (n.d.) across the European Union for 2000 show that in the Netherlands, the percentage of owner-occupied housing (53%) is low

compared to the United Kingdom (71%) and the United States (66%, U.S. Census Bureau, 2000). This probably serves to limit mobility. In addition, it is the aim of Dutch care policy to stimulate people to live independently as long as possible. The Dutch government subsidizes home adaptations as well as formal care, stimulating older Dutch adults to postpone moving to residential care facilities. The lengthy assessment procedures for residential care and long waiting lists also delay the actual move to a care facility.

METHOD

Respondents

Data were derived from the Longitudinal Aging Study Amsterdam (LASA), an ongoing longitudinal, multidisciplinary research project focused on a wide range of topics related to the physical and cognitive health, and social and psychological functioning of the ageing population (Deeg et al., 1993). This program used a stratified random sample of men and women born from 1908 to 1937. The oldest participants, particularly the oldest men, were over-represented in the sample. The sample was taken from the population registers of eleven towns varying in religion and urbanization. The LASA sample was initially recruited for the *Living Arrangements and Social Networks (LSN) of Older Adults* research program (Knipscheer et al., 1995). Of the 6,107 eligible individuals in the LSN sample (T0), 2,302 (38%) were unwilling to participate due to a lack of interest or time; another 734 had died or were too ill or cognitively impaired to be interviewed. A total of 3,107 LSN sample respondents took part in the first (T1) LASA cycle (1992/1993). In 1995-1996 (T2, N = 2,545), 1998-1999 (T3, N = 2,076) and 2001-2002 (T4, N = 1,691), follow-ups were conducted. After T1, 1,051 (34%) respondents had died, 222 (7%) refused to cooperate and 143 (5%) were ineligible or not contacted. The intervals between the observations were an average of 3.0 years (SD = 0.3) and the interval between T1 and T4 ranged from 8.2 to 9.9 years (n = 1,674, M = 9.0, SD = 0.2).

In this study, we confined ourselves to respondents living independently at T1 with at least one follow-up observation available (N = 2,481). From this sample, 58 respondents who were institutionalized and six who lived at a monastery are excluded, as were 907 respondents with data partially missing at one or more observations. Most of them were too physically or cognitively weak to be interviewed with the full questionnaire. At T1, the 1,160 males and 1,321 females were between the ages of 55 and 86 (M = 69.5, SD = 8.5). Of these respondents, 65% were married and 24% widowed.

Instruments

Types of moves

On the basis of the respondent's address, we could tell at each observation whether a respondent had moved in the previous three years. The interviewer could classify the type of housing as *regular housing* (e.g. attached row, detached, apartment building), *housing adapted for older adults* (e.g. apartment building with services, housing near an institution including services provided by the institution), or *an institution* (residential or nursing home). Several types of moves were derived from this information, i.e. *from regular to other regular housing*, *from regular to adapted housing* and *from regular or adapted housing to an institution*. A second categorization was based on the distance of the move, i.e. *in the neighborhood*, *outside the neighborhood but in the town* (an average of 2.5 kilometers), *outside the town but in the country* (an average of 42.3 kilometers, with a maximum of 244 kilometers), and *abroad*. The distance of the move was measured by the postal code and town boundaries; using only one of them would give a biased view, since both vary in size.

Triggers

At each observation, the respondents were asked whether they had a paying job, children living in the household, and a spouse. As to the job, the children in the household and marital status, an altered situation at the follow-up was considered a life event or trigger.

We considered five aspects of health, which included objective and subjective indicators. The five aspects were covered in six questions about difficulty performing activities of daily living (ADL) such as "Can you walk up and down stairs?" The possible answers were *not at all*, *only with help*, *with a great deal of difficulty*, *with some difficulty* and *without difficulty*. The sum-score indicated the ADL capacity (reliability $\alpha = .87$).

A direct question assessed the individual's health related to limitations in functioning: "Are you restricted in your activities of daily living due to chronic illnesses, health disorders or handicaps"? The possible answers were *no limitations*, *slight limitations* and *severe limitations*.

Subjective health was assessed by asking "How is your health in general?" The possible answers were *poor*, *not so good*, *fair*, *good* and *very good*. Respondents could fill in any of seven chronic diseases, i.e. *pulmonary disease*, *cardiac disease*, *arteriosclerosis*, *stroke*, *diabetes*, *arthritis* and *malignant neoplasm*. Cognitive functioning was assessed using the Mini Mental State Examination (MMSE; Folstein et al., 1975). We constructed one composite variable for health, because we were not interested in the five specific aspects of health. A *decline* in health between two observations as a trigger was considered significant if the score on any of the five

health aspects was poorer at the second observation and the difference from the first observation was more than one standard deviation. Since there were few respondents with a decline on more than three health aspects, we condensed decline scores of three or more points into one category of a *severe* decline in health. The other categories included a *moderate* (two points difference) or *slight* decline in health (one point difference) and *stability*.

Based on these questions, we defined the following triggers: *retirement*, *an empty nest*, *widowhood* and *a decline in health*.

In accordance with the definition in the Introduction, we categorized conditions under four life domains: *employment*, *family*, *health*, and *home*.

Employment

We considered income a condition related to the domain of employment. Net household income was divided into twelve classes. Missing values (6%) were replaced by the mean income in the neighborhood based on data provided by Statistics Netherlands. A monthly income of 800 Euros or less was considered a low income.

Family

One of the variables indicated if the respondent has children. If so, the amount of time it took to travel to each child using whatever transportation the respondent usually uses is the assessed travel time between parents and children. Travel time to the nearest child was determined and dichotomized as within ten minutes, excluding children living in the household, and at a distance over ten minutes. Another variable assessed the presence of a spouse in the household.

Health

Unlike a decline in health as a trigger, we defined health status as a condition moderating the effects of other triggers. Based on the composite variable described above, health status as a condition was categorized as *severe health problems* (4% of the respondents had a score more than one standard deviation below the mean for three or more aspects), *moderate health problems* (two aspects, 9%), *slight health problems* (one aspect, 25%), or *no health problems*, i.e. no downward deviation on any health aspect (62%). Lastly, we interpreted age as an indicator in the life domain of health as well.

Home

The interviewer observed the accessibility of the home, i.e. with a ground floor entrance or elevator access, or an entrance via stairs. The extent of home adaptations was

assessed, e.g. extra handrails or adaptations in the kitchen, bedroom or bathroom. One variable pertained to home ownership. The percentage of recreational and nature areas in the town affected the attractiveness of the environment. The level of urbanization of the neighborhood was divided into five classes ranging from *not urban* (less than 500 addresses per square kilometer) to *highly urban* (more than 2,500 addresses). The data were derived from a database provided by Statistics Netherlands (Den Dulk et al., 1992). A factor score derived from the mean household income, the percentage of households with a low income, the percentage of unemployed people and the percentage of households with a poor educational level indicated the social status of the neighborhood. This factor score was derived from a database provided by a commercial firm.

Procedure

To facilitate the statistical analysis, we accumulated the data of longitudinal observations and selected 710 respondents who moved between T1 and T2, between T2 and T3 (if not between T1 and T2), and between T3 and T4 (see the description of the results). Matching each respondent who moved with non-movers enhanced the study of the determinants of moving. For each moving respondent, we needed non-movers from the same observation interval for comparison. Matching non-movers was considered successful if respondents were observed at a minimum of two consecutive waves, if these observations were made at the same waves as for the mover, if they had not moved during any of the observations, if they had the same gender as the mover, and if the absolute age difference with the mover was no more than five years. To obtain as much variance in the sample of non-movers as possible, we looked for two matching non-movers. A first match was available for all the movers, a second one failed for 59 older women who were institutionalized and another 19 women. The sample of matched non-movers included 1,342 respondents. The matching procedure yielded subsamples of movers and non-movers that did not differ in gender composition ($\chi^2_{(1)} = 1.1$, $p > .05$) and average age (M = 73.3 for movers and M = 72.5 for non-movers, $t_{(2050)} = 1.9$, $p > .05$).

To answer the first research question, we conducted a multinomial logistic regression analysis of the three types of moves on each trigger, controlled for gender and age. The aim of this analysis was to determine whether triggers and relocation coincided in the same observation period. The triggers were retirement, an empty nest, widowhood and a decline in health. Not having moved and not having experienced a life event were both categories of reference. The Wald statistic, which is χ^2 distributed, evaluated the significance of a predictor. The odds ratio (OR) expressed the effect of a specific predictor, which is positive if OR > 1, negative if OR < 1, and there is no effect if OR = 1.

As regards the second research question, we addressed whether an accumulation of triggers and conditions affected the probability of a specific move and examined the effects of conditions separately for each trigger. Each of the analyses was restricted to older adults who have experienced a trigger related to the specific type of move. For example, we examined which conditions contributed to the retired respondents moving to regular housing. We conducted eight of the twelve possible logistic regression analyses (four triggers x three types of moves). The other four combinations of triggers and moves included too few respondents. We used a stepwise procedure because of the large number of explanatory variables in relation to the number of respondents. For the same reason, we only included the variable added first to the equation ($p < .05$). Conditions included the respondent characteristics (income in the employment domain; children, traveling time to closest child and marital status in the family domain; health and age in the health domain; gender), home characteristics (accessibility, adjustments and tenure) and neighborhood characteristics (attractiveness of the environment, urbanization and social status) in the home domain, all measured at the pre-move observation for movers and at the first selected observation for non-movers.

Results

Of the 2,481 respondents, 89% lived in a regular home and 11% in adapted housing at T1. Before turning to the research questions, we describe the moves in greater detail. The results showed that older Dutch adults did not move frequently. In the nine years from T1 to T4, 739 (30%) respondents moved, 107 of them more than once. Except for 41 who stayed in the same type of housing, most of the multiple movers changed the type of housing. Eight multiple movers went from a regular home via adapted housing to institutionalization. At each observation, about 13% had moved once or more in the previous three years (Table 1). Half the moves were to suitable housing for older adults: about 4% of the respondents were institutionalized and 3% moved from regular to adapted housing. The others moved from regular to other regular housing (6%) or made another move, for example from adapted housing to regular housing or to other adapted housing (1%). Due to the small number, the latter category ($n = 29$) was not taken into account in further analyses. In the cases of the remaining movers ($n = 710$), the first move was taken into account (note that the number of movers was smaller than the row totals in Table 1 suggest). We studied 327 older adults who moved from regular housing to other regular housing, 170 who moved from regular to adapted housing, and 213 who moved from regular or adapted housing to be institutionalized.

The new homes of respondents who moved to regular housing (*n* = 327) more often had special adjustments such as an adapted telephone or an alarm (2% as compared to 0% in their former homes), adaptations to the stairs (24% as compared to 6%), and adaptations to the kitchen, bathroom or bedroom (19% as compared to 4%).

Table 1. Number of older adults who moved (N = 2,481)

	T1 - T2		T2 - T3		T3 - T4	
	abs.	%	abs.	%	abs.	%
Did not move	2,157	87	1,770	87	1,457	87
Moved, according to type of move						
Institutionalization	80	3	77	4	70	4
From regular to adapted housing	84	3	52	3	39	2
From regular to regular housing	147	6	122	6	84	5
Other move	13	1	20	1	24	1
Moved and not institutionalized, according to distance						
In the neighborhood	95	4	66	3	55	3
Outside the neighborhood, in the town	85	3	64	3	42	3
Outside the town, in the Netherlands	62	2	63	3	34	2
Outside the Netherlands	2	0	1	0	2	0
Deceased			319	–	633	–
No observation, otherwise			121	–	174	–

Note. Multiple moves are included.

Some sold their former home and rented their new one (14%), others became homeowners (7%). Differences between former and new homes were more pronounced in respondents who moved from regular to adapted housing (*n* = 170). Almost all of them now had a ground floor entrance or elevator access (99% as compared to 87% of their former homes). Moreover, there were more often home adjustments: adapted telephone or alarm (40% as compared to 1%), adaptations to the stairs (66% as compared to 14%), and adaptations to the kitchen, bathroom or bedroom (55% as compared to 13%). Many sold their former home and now rented their new one (29%). One respondent became a homeowner (1%).

With regard to the moving distance, we excluded the institutionalized respondents (*n* = 213), since they have little choice as to where they move to. Many moves from regular to other regular or adapted housing were local: 37% in the neighborhood, 34% to another often nearby neighborhood in the same town, and 28% to outside the town (*n* = 497). Five respondents moved abroad.

The type of move was associated with the moving distance (n = 493, $\chi^2_{(2)}$ = 24.4, p < .001). Older adults who moved to adapted housing more often stayed in the neighborhood (49%), and less frequently left the town (15%), as compared to those who moved to regular housing. For this group the results were reversed; they more often left the town (35%) and less frequently stayed in the neighborhood (31%).

In the cases of the respondents who had left the neighborhood (n = 308), the new neighborhood had a higher status (M = 55.6) than the old one (M = 52.1, $t_{(307)}$ = 4.0, p < .001). The degree of urbanization did not differ, nor did the attractiveness of the environment. Furthermore, older adults more often lived closer to a child after a move. Before leaving the neighborhood, 88 respondents lived close to a child, as did 108 after moving ($\chi^2_{(1)}$ = 44.2, p < .001). Of these movers, 32 had a child close by in the old neighborhood and not in the new one, and 52 were in the opposite situation.

In response to both the research questions, we compared 710 movers and 1,342 matched non-movers. Of the four selected life events or triggers that determined a specific move, a decline in health was most frequently observed. A moderate or severe decline in health was observed in 11% of the older adults: 3% were retired, 5% experienced an empty nest, and 6% were widowed. Of the respondents, 60% had experienced no life event or only a small decline in health. The co-occurrence of these events was rare (4%). The average age when life events occurred differed: the mean age at baseline of those who had retired was 63.8 (SD = 7.7), of those with an empty nest 66.4 (SD = 7.7), of those who were widowed 74.9 (SD = 7.1), and of those with a decline in health 77.5 (SD = 7.3).

Table 2. Multinomial logistic regression analysis of types of moves on life events in other life domains (N = 2,052)

	Institutionalization (n = 213)		From regular to adapted housing (n = 170)		From regular to regular housing (n = 327)	
	Wald	OR	Wald	OR	Wald	OR
Age (54-91)	136.7***	1.17	9.9**	1.03	66.3***	0.93
Sex (male-female)	11.7***	1.80	0.0	0.98	0.3	0.93
Retirement	0.3	0.57	1.6	1.90	5.5*	2.05
Empty Nest	9.9**	3.86	0.5	1.36	3.2	1.58
Widowhood	1.8	1.48	4.2*	1.79	0.4	1.20
Decline in health (0-3)	33.0***	1.51	0.3	0.95	0.9	0.93

Note. Did not move (n = 1,342) and did not experience a life event are categories of reference. All the Wald statistics have one degree of freedom.
* p < .05. ** p < .01. *** p < .001.

With regard to the first research question, we examined which triggers in different life domains could be associated with the three types of moves. Table 2 shows that each of the selected life events was relevant to a specific move. Institutionalization was more likely to occur if there was a decline in health, an event that occurs more often late in life. The odds ratio for a one-point decline in health was 1.51, indicating that older adults with the strongest decline in health are about three and a half times more likely to be institutionalized than those with unchanged health. In addition to a decline in health, an empty nest triggered institutionalization.

A move to adapted housing was more likely after the loss of a spouse. This type of move is characteristic of people at an advanced age. A move to other regular housing was more likely after retirement. The effects of all the triggers were controlled for age and gender differences. As is to be expected, the youngest older people are more likely to move to other regular housing and the oldest ones and women are more likely to be institutionalized. The gender effect in institutionalization might apply to the oldest men, who more often live with a spouse than the older women.

The four triggers were related to the moving distance (Table 3). Retired people were more likely to move in the neighborhood as well as outside the town. After the last child left home, older adults predominantly moved in the neighborhood. The oldest ones were most likely to move in the neighborhood. Widowhood and a decline in health were not related to the moving distance.

Table 3. Multinomial logistic regression analysis of distances of moves on life events in other life domains (N = 1,472)

	In the neighborhood (*n* = 186)		Outside the neighborhood, in the town (*n* = 168)		Outside the town (*n* = 143)	
	Wald	OR	Wald	OR	Wald	OR
Age (54-91)	8.1**	1.03	3.5	1.02	3.1	0.98
Sex (male-female)	0.5	1.12	0.3	1.10	0.0	0.99
Retirement	7.4**	3.00	1.5	1.81	7.5**	2.91
Empty Nest	15.6***	3.13	0.1	1.12	0.3	0.77
Widowhood	1.9	1.53	0.4	1.26	0.7	1.36
Decline in health (0-3)	0.1	1.02	1.7	0.87	0.1	0.96

Note. Institutionalized respondents (*n* = 213) and the matched non-movers (*n* = 367) are excluded. Did not move (*n* = 975) and did not experience a life event are categories of reference. All the Wald statistics have one degree of freedom.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4. Overview of logistic regression analyses of types of move on conditions among older adults who experienced a life event

	Institutionalization			From regular to adapted housing			From regular to regular housing		
	Moved *(n)*	Matched non-mover *(n)*	Identified condition (*)	Moved *(n)*	Matched non-mover *(n)*	Identified condition (*)	Moved *(n)*	Matched non-mover *(n)*	Identified condition (*)
Retired	1	4	(**)	5	0	(**)	22	23	(***)
Empty Nest	9	4	(**)	7	8	(**)	28	38	(***)
Widowhood	18	26	Poor health status	17	22	(***)	18	27	Non-adapted house
Decline in health	120	151	Poor health status	59	111	Attractive environment	81	156	Entrance via stairs

(*) Variable added first to the equation ($p < .05$).
(**) Analysis not performed due to too few cases.
(***) No condition identified in the stepwise procedure ($p < .05$).
Note. Conditions included in the stepwise procedure are the respondents' characteristics (income, having children, travelling time to child living closest, living with a spouse, health, age and gender), home characteristics (accessibility, adjustments and tenure) and characteristics of the neighborhood (attractiveness of the environment, urbanization and social status), all measured at the pre-move observation for movers and the first selected observation for non-movers.

The second research question addressed whether an accumulation of triggers and conditions affected the probability of a specific move. Table 4 provides an overview of the results of the logistic regression analyses. For four combinations of triggers and moves, the number of respondents was too small to conduct statistical analyses. For the remaining eight combinations, some samples were small due to the low prevalence of triggers. The first analysis pertained to the combination of retirement and moving from regular to other regular housing. As is noted above, 327 respondents moved to regular housing, 22 of whom made a transition to retirement. Of the 647 non-moving respondents matched to respondents moving to regular housing, 23 made the transition to retirement. As is shown in Table 4, the comparison of the 22 retired movers with the retired 23 non-movers did not reveal conditions that increased the likelihood of moving to other regular housing.

No conditions were relevant either in respondents who experienced the trigger of an empty nest. In those who were widowed, health problems at the pre-move observation (OR = 2.25, $p < .01$) did increase the likelihood of institutionalization. For example, a moderate health status, i.e. a score more than one standard deviation below the mean for two health aspects, increased the likelihood of institutionalization by a factor of more than five compared to widows and widowers without health problems. We did not identify any condition that increased the likelihood of widows and widowers moving to adapted housing among. Living in a house without adaptations such as extra handrails increased the likelihood of a move to other regular housing among widows and widowers (OR = 5.50, $p < .05$). In those who experienced the trigger of a decline in health, conditions were identified for all three types of moves. A poor health status at the pre-move observation increased the likelihood of institutionalization (OR = 1.72, $p < .001$). Living in an attractive environment increased the likelihood of a move to adapted housing (OR = 3.45, $p < .05$). Having an entrance to the house via a staircase increased the likelihood of a move to other regular housing (OR = 3.12, $p < .05$).

Discussion

Our purpose had been to examine various kinds of moves by older Dutch adults from a life course perspective. We used the conceptual frameworks developed by Litwak and Longino (1987) and Mulder and Hooimeijer (1999) as our starting point to examine the impact of life events or triggers and conditions on residential mobility. The focus was mainly on moves to an institution, adapted housing and regular housing, and on moving distance. Triggers and conditions were defined in the life domains of employment, family, health and the home. Our first aim was to find out which triggers were related to specific moves. Subsequently, we studied the moderating effects of conditions.

Moves to residential care facilities were triggered by a decline in health, which is in

accordance with the life course framework developed by Litwak and Longino (1987). The results furthermore showed that being older and having the last child leave home also increased the probability of institutionalization. These two additional factors are both indicative of the risk involved in living alone. In the case of health problems, the primary caregiver is most likely to be the spouse or children living in the household (Broese van Groenou & Van Tilburg, 1997). Freedman (1996) and other researchers (Pot et al., 2001) have noted that married older people are about half as likely to be admitted to a nursing home as older people who live alone.

Health status had a conditioning effect on the likelihood of institutionalization after a life event. Widowed respondents and those experiencing a decline in health were more likely to be institutionalized if they already had health problems at our first observation. The first effect is the most striking, as we did not observe a direct effect of widowhood on the likelihood of institutionalization. The moderating effect of recurring health problems is indicative of the important role of informal care givers in the household in avoiding institutionalization. It is less surprising that a decline in health increases the likelihood of being institutionalized if it exacerbates already poor health. It may mean the decline in health is less important in predicting institutionalization than the current state of health. We used a broad indicator of health, which fits our purpose of studying the impact of important life changes on various moves. However, this may not be sufficient for an in-depth understanding of the factors involved in institutionalization. Most notably, admission procedures and waiting lists impact the occurrence and timing of institutionalization. We can conclude however that of the life domains, health is the main factor in institutionalization as a trigger and as a condition in combination with widowhood. The other domains were irrelevant to this type of move.

Moves to adapted housing were triggered by widowhood. We did not observe any moderating effects of conditions in combination with widowhood. Nor were there effects on the moving distance. This suggests that having children available to provide support does not play a significant role in this type of move, even though moving to adapted housing clearly involves a greater need for support and care. In this sense, the model developed by Litwak and Longino (1987) cannot be confirmed. We did observe that older adults who live in an attractive environment were more likely to move to adapted housing after a decline in health. These areas are most typically in rural surroundings, which can mean more limited availability of specialized services and other assistance than in urban areas. This stimulates people to move earlier to adapted housing in or outside their region than if they can arrange more care and adaptations in their original home. This is in line with the return migration observed by Litwak and Longino (1987), insofar as health considerations stimulate a move away from recreational housing.

A move to regular housing had several triggers. Retirement triggered a move in

one's own neighborhood as well as over a greater distance. In the first instance, the latter seems in line with the life course framework developed by Litwak and Longino (1987). Older adults indeed move to a neighborhood with a higher status, thus improving their living environment. However, there is no evidence that people move to more rural or attractive areas. Moves to attractive, rural areas have been observed in the Netherlands (Fokkema, 1996; Thissen, 1995; Van der Molen, 1993), but the rates are low. Only 6% of the people who move from urban to rural areas in 2001-2002 are above 55 (WBO, 2002). The distance from the Dutch coast on the west to the border on the east is about 150 kilometers, which takes about an hour and a half by car. The short distance may explain this low mobility. Many older adults remain for longer periods at caravan parks relatively close to their homes in the summer. A more common pattern for Europeans is also to spend part of the winter in Southern Europe without giving up their homes (Warnes et al., 2004). This may be perceived as a European variety of retirement moves observed in the USA and elsewhere, as older people seek out a better environment after retirement.

In addition to retirement, an empty nest could trigger a move, predominantly in the neighborhood. The most plausible explanation is that people move to a smaller house after their children leave home, but do not want to leave their familiar neighborhood. The proximity of children is not an important factor in choosing the new house, although we did note bivariate differences in moving distance related to the proximity of children. The small samples in the multivariate analyses only yielded the most robust effects. It is more interesting to note that the effects of a decline in health and widowhood, neither of which were associated with moves to regular housing in the first analysis, were moderated by the home characteristics in our second analyses: people who were widowed or experienced a decline in health moved to other regular housing if their old home was not fitted with special adaptations or if the entrance was not on the ground floor. Here we find an echo of Litwak and Longino's comfort move: people do not move closer to their children, but we do see that events associated with the onset of old age trigger a move to housing that may be better suited to future needs.

In conclusion, we have found partial support for the life course framework developed by Litwak and Longino (1987). Each of the life events studied – retirement, empty nest, widowhood and a decline in health – triggered specific moves. There is however no indication of a specific trajectory of moves associated with consecutive life events. The motives Litwak and Longino have ascribed to the various moves, which are related to leisure and care from children or professionals, cannot be replicated either. Although we did not specifically inquire into the motives for moving, the observed patterns deviated from Litwak and Longino's life course framework on many points. It is obvious that moving distances play a different role in the Netherlands than the USA.

The opportunities and restraints offered by the local context can also be an important condition moderating the effects of life events on specific moves.

The proximity of children, either inside or outside the household, is not a decisive factor in residential choices. Only the major effects were visible in our sometimes small samples. A theoretical consideration is also that the role of children in most migration and other studies is reduced to their actual or possible role as caregivers (Silverstein & Angelelli, 1998; Stoller & Longino, 2001). In addition to the social advantages, having children nearby is likely to entail the psychological benefits of grandchildren in the vicinity (Oswald & Rowles, 2006). Since the distance to children as a reason not to move out of the neighborhood is left out of consideration altogether in most previous studies, we believe the role of children is underestimated in these studies.

As to our second research question, the accumulation of triggers and conditions, as suggested in the life course framework of residential mobility developed by Mulder and Hooimeijer (1999), is a valuable adjustment to the theoretical framework. As is noted above, the impact of specific life events often depends on the presence of conditions. Especially the effect of a decline in health on various types of moves was moderated by other conditions that were largely related to the availability of care and support.

The small number of movers and relatively low frequency of co-occurrence of some events limit our analyses. This means our results can only be interpreted in an exploratory manner. The actual impact of events on residential moves may be underestimated. We measured events and moves in the same observation period and thus missed the longer-term effects of an event. It can be several years between the first idea of moving after an event such as widowhood and the actual move. We also had no observations on older adults who were institutionalized or deceased before the second observation.

Regardless of the possible underestimates, the scarcity of cases in an otherwise fairly large and representative sample of older adults keeps us from drawing up a normative account of moves in relation to specific events and conditions. As the model of Mulder and Hooimeijer (1999) also shows, there is no single path leading from a life event to a specific residential outcome. Important life changes may serve as reasons for moving, but the actual move depends on other events and conditions as well.

Focusing on the life course has two important advantages over more geographical models such as the *push and pull* factor model applied by Haas and Serow (1993). Firstly, it is analytically difficult to distinguish factors that push and pull at the individual level. Does a lack of adaptations push an individual out of the house? Is the presence of adaptations in a new home a pull factor that makes the individual move? What would the individual have done if a suitable new home had not been available? The same argument could be made about triggers and conditions, since these concepts

do not guide empirical classification either. But unlike push and pull factors, triggers and conditions do help analyze how various factors may lead to specific residential changes. Secondly and more substantively, push and pull factors are mainly focused on housing and area characteristics. The life course framework focuses however on how specific events and conditions affect individual choices in a social and spatial context. The more complex model developed by Mulder and Hooimeijer (1999) has the extra advantage of analysing joint effects of various events and conditions, which makes it more valid than most simpler models.

There are also certain limitations to our approach. We limited ourselves to objective factors and triggers outside the person. We were unable to analyse the actual decision-making process leading up to residential relocation. Personal appraisals, for example, are important in how specific events generate a residential move (Oswald & Rowles, 2006; Rowles & Watkins, 2003). Where people live is linked in many ways to how they live and experience life, and a decision to move also touches upon many psychological areas. A fuller understanding of late-life relocation would be greatly enhanced by a combination of sociological and psychological approaches. A life course model could serve as a framework, since it would allow for the incorporation of subjective triggers and conditions.

Chapter 3

Minder eenzaam na verhuizing?
Less lonely after moving?

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Abstract

Using Lawton's (1989) ecological model of aging, this study examined the extent to which relocation affected social networks and feelings of loneliness. A total of 263 older Dutch adults (average age of 73) with health problems were selected from the Longitudinal Aging Study Amsterdam. Results of multi-level regression analyses showed no difference in the size of the core and peripheral social networks before and after a move. People who moved to a care setting were less socially lonely than those who moved to adapted or regular housing and non-movers, and were less emotionally lonely after the move. We concluded that some older adults feel more comfortable in a care setting, which apparently gives them opportunities for friendships and intimate conversations. Our findings question the Dutch policy focused on enabling all older adults to live independently as long as possible.

Introduction

'You cannot shift an old tree without it dying' the old proverb tells us and, unsurprisingly, the Dutch policy on housing for older adults seems to be firmly rooted in this conviction. It is however debatable whether older adults are better off living independently than their peers who have moved to adapted housing or other special living arrangements. For those with severe health problems, loneliness can even diminish after moving to a residential care facility or nursing home. Some old trees do blossom again.

The Dutch housing policy aim is to enable older adults to live independently as long as possible. The rationale is that it is better for them to stay in their familiar home and neighborhood (Council for Housing, City Planning and the Environment, 2005). The government subsidizes home adaptations and allocates funds for professional home care. Since most older adults prefer to live independently, this policy meets with public approval. In 2002, many older adults lived independently up to a very late age; almost 88% of the people above the age of 75 lived outside a care setting. In the 90-to-94 age group, about half had an independent household. Only a majority of those above the age of 95 lived in a residential care facility or nursing home (The Netherlands Institute for Social Research, 2004). As they grow older and their health and mobility decline, people run into difficulties in their living environment. A flight of stairs can be an obstacle and make it impossible to use the upstairs rooms. Many older adults accept the limitations for fear of losing their social contacts if they move. The costs can also discourage them from moving (Council for Housing, City Planning and the Environment, 2005). Despite growing health problems, older adults tend to postpone a move to adapted housing, sometimes indefinitely. Results of the Longitudinal Aging Study Amsterdam (LASA) show that older adults do not move often. In a three-year period (1995-1998), only 13% of the people above the age of 55 moved, 6% of them to regular housing, 3% to adapted housing and 4% to a residential care facility or nursing home. In later periods, the percentages were about the same. Most older adults only move short distances and often stay in their old neighborhood or municipality.

Well-being

The question remains, however, whether independent living, as state policy propagates, really is the best option for everyone. Living independently can be an enormous challenge, especially for older adults with serious health problems. Health problems can render older adults homebound and less able to maintain their personal relationships (Van Tilburg & Broese van Groenou, 2002). For some older adults, driving can be increasingly difficult, though they are still able to go shopping and go to

neighborhood centers on foot. Although this allows them to stay in contact with network members who live nearby, they are increasingly cut off from those they used to visit by car. Growing health problems not only cause a loss of social contacts, they put increased pressure on the remaining ones. Older adults in need of help or care tend to withdraw from relationships because they don't want to overtax their friends (Essex & Nam, 1987). For informal care they usually turn to relatives, often their partner or if the partner is no longer alive, their children (The Netherlands Institute for Social Research, 2005). If children take over many of the household chores and care tasks, the relationship with their parents can be overtaxed. The task load does not leave enough room for intimate conversations or consolation, and the social and emotional aspects of the relationship are detrimentally affected. The negative interactions that often result can be amplified by feelings of dependency caused by a give-and-take imbalance in the relationships (Akiyama, Antonucci, Takahashi, & Langfahl, 2003). Feelings of loneliness can emerge or intensify.

Competencies and environment

Moving can be a solution for older adults with health problems. Lawton's (1989) ecological model of aging proposes an optimal situation where people's competencies fit the environment they have to function in. People's competencies are generally closely linked to the state of their health. The environment is composed of the physical environment, the house and neighborhood, and the social environment, relationships with friends, relatives and neighbors as well as informal and professional care relationships. Health problems disrupt the balance between older adults and their environment. To prevent diminished well-being, adaptations need to be made to either the competencies or the environment. Over the years, the model has undergone any number of revisions, but it is still true that health problems necessitate adaptations.

Changes in the interaction between people's health and their living environment impact older adults more than younger people. Many older adults have lived in the same house for a long time and are attached to the familiar environment. It can give them a sense of security and continuity at a time when health problems threaten their autonomy. Moreover, the social environment of older adults often shrinks as the physical environment makes it hard for them to start and maintain social contact with others. Adapting the physical environment by moving can improve the social environment. The older adults' sense of autonomy is restored, which has a positive influence on their well-being. Although older adults are generally not inclined to change their physical environment when faced with health problems, moving can then have a positive effect on their well-being. To test this hypothesis, we examined whether older adults with health problems who moved to adapted or other special living arrangements had

more social relationships than those who stayed where they were. We also examined whether they were less lonely after moving than those who stayed in their home.

Moving to a new environment can stimulate older adults to start new relationships, which can have a positive effect on their well-being. The Dutch housing policy for older adults seems to overlook this, and focuses exclusively on the potential loss of social relationships after moving.

Moving

Moving to adapted housing restores the balance between older adults' competencies and environment. Older adults with milder health problems can move to ground floor adapted housing, homes in the community with special adaptations or service apartments with care arrangements. Older adults with severe health problems often have no choice but to move to a residential care facility or nursing home. Whichever option is selected, they are surrounded by their peers, which gives them ample opportunity to start new relationships. A move to a nursing home also means professional care-givers to alleviate the family's burdens and help restore balance to the relationships between the older adult and family care-givers. Several studies note the positive effects of moving. Field, Walker, and Orrell (2002) show that older adults who move to adapted housing because of their own or their partner's health problems are predominantly happy in their new environment. Not only do they see their relatives just as often as before, most older adults also make new friends. Another study shows that older adults experience unexpected gains because the new environment offers opportunities to engage in new activities or socialize in other ways (Smider, Essex, & Ryff, 1996).

Social networks and loneliness in the study

Whether older adults with health problems have more social relationships and are less lonely after moving to adapted housing or special living arrangements than those who do not move has been studied using data from LASA. LASA is a longitudinal multidisciplinary research project initiated in 1992 at the VU University Amsterdam.

Using structured, computer-supported questionnaires (Huisman et al., 2011), older adults born from 1908 to 1937 were interviewed five times about their living arrangements and social networks. A total of 263 older adults with health problems were selected from the LASA sample; their average age was 73 and 61% had a partner. Of this group, 63% did not move during the period studied. About one third of the others moved to a regular house, another third to adapted housing, and one third to a residential care facility or nursing home. Since any type of move can result in

loneliness, moving to a regular house is also included in the study. Next, the selected older adults were compared on the basis of four characteristics, two types of loneliness and two types of social networks. Loneliness is defined as the perceived discrepancy between what one wants in terms of interpersonal affection and intimacy, and what one has. Thus the degree of loneliness people experience depends on how they perceive their relationships with others or the lack thereof (De Jong Gierveld, 1998). Social loneliness refers to a situation with fewer relationships than desired. Emotional loneliness refers to the content of the relationships. There can be a perceived lack of intimacy in relationships, the absence of a confidant, a lack of companionship or too limited a circle of friends. The first type of social network, the core network, consists of emotionally close relationships, with relatives or friends. The second type, the peripheral network, consists of less intimate relationships, with neighbors, fellow club members or acquaintances.

Effects of moving in the study

We compared the older adults' networks and levels of loneliness before and after moving. Since aging itself can cause changes, we also compared older adults who moved to those who did not. The older adults in this study were selected on the basis of their declining health. Variations in loneliness and network size can be linked to characteristics such as sex, age and partner status, so these characteristics were also included in the study. Whether older adults moved and if so, what kind of move it was, was virtually the same among men and women and older adults with or without a partner. On average, those who moved to a residential care facility or nursing home were 78, five years older than the mean. Before they moved they had more often received professional care, which is indicative of relatively severe health problems. No differences were found in informal care. Variations in network size and emotional loneliness before moving were small (Table 1). Variations in social loneliness were larger. Older adults who moved to a residential care facility or nursing home were less socially lonely before they moved than other older adults. One might expect lonely older adults to receive priority as regards admission into care facilities, but the data did not support this.

Network data were missing for many older adults who moved to an institution because their health problems prevented them from completing the full interview. Further analysis showed that moving to regular or adapted housing did not change the two network types, the core and peripheral network. Nor were any changes found in the degree of social loneliness. Emotional loneliness did however vary. In comparison with non-movers and those who moved to regular or adapted housing, older adults who moved to a residential care facility or nursing home were less emotionally lonely.

Better off in a care setting

This study shows that network size does not change after moving. Fears of a reduced number of social contacts as a result of moving seem unfounded. In a small group of older adults, emotional loneliness decreases after moving. These older adults, who move to a residential care facility or nursing home, have multiple problems affecting various aspects of their lives. They are no longer capable of maintaining a household independently and more often need professional care. They are at an advanced age with diminished cognitive capacities and often without a partner. The drop in emotional loneliness after moving is striking, since emotional loneliness is usually associated with an absence of intimate relationships as often occurs after the death of a partner. It is also associated with a lack of companionship and a very limited circle of friends. Emotional loneliness refers to relationship quality rather than quantity (Van Baarssen, Snijders, Smit, & Van Duijn, 2001). One would expect this quality to be higher in the familiar living environment before a move, but this is not the case. The fact that emotional loneliness decreases after moving into a care setting indicates that prior to the move, the emphasis in social relationships was on care tasks rather than social or emotional aspects. After moving to a residential care setting or nursing home, older adults apparently experience a sense of warmth and security, allowing them to open up to social interaction, make new contacts, and confide in people. They no longer have to cope with their limitations on their own, they receive round-the-clock care and help is on hand in an emergency. Their life is now embedded in a pattern of communal daily activities, meals, occupational therapy and social functions, providing ample opportunity for contact with other residents. Lawton's (1989) ecological model of aging fit older adults well who used to live in a situation where their competencies and living environment were out of balance. In short, adapting their living environment by moving has a positive effect on their well-being. The results of this study strongly urge a reexamination of the current Dutch policy on older adults.

Appendix on Methods

Respondents

Data were derived from the Longitudinal Aging Study Amsterdam (LASA), an ongoing longitudinal, multidisciplinary research project focusing on a wide range of topics related to the physical and cognitive health as well as the social and psychological functioning of the aging population (Huisman et al., 2011). This program used a stratified random sample of men and women born from 1908 to 1937 and representative of the Dutch population. The oldest respondents, particularly the oldest men, were

over-represented in the sample. The sample was taken from the population registers of eleven municipalities varying in religion and urbanization. The LASA sample was initially recruited for the Living Arrangements and Social Networks (LSN) of Older Adults research program (Knipscheer et al., 1995). Of the 6,107 eligible individuals in the sample, 2,302 (38%) refused to cooperate due to a lack of interest or time, and another 734 were ineligible because they were deceased or too ill or cognitively impaired to be interviewed. Follow-ups were done in 1992-1993 (T1, N = 3,107), 1995-1996 (T2, N = 2,545), 1998-1999 (T3, N = 2,076) and 2001-2002 (T4, N = 1,691, 44% of the T0 respondents). After T1, 1,051 (34%) of the respondents were deceased, 222 (7%) refused to cooperate and 143 (5%) were ineligible or not contacted. The intervals between the observations were on average 3.0 years (SD = 0.3) and the interval between T1 and T4 ranged from 8.2 to 9.9 years (*n* = 1,674, M = 9.0, SD = 0.2).

In this study, we selected 2,610 respondents who lived in regular housing at T1 (see Chapter 2, Bloem, Van Tilburg, & Thomése, 2008a for the definition). At T2, data were available for 2,208 of them. We excluded respondents who had not had a face-to-face interview at T2 (leaving N = 2,005). Lastly, we selected respondents who had a decline in their physical and cognitive capacities. A decline was defined as a score of 25 or higher at T1 and a score of 24 or lower at T2. A total of 130 respondents had a decline in functional capacities (100 a decline in cognitive capacities and 33 a decline in both physical and cognitive capacities). The 263 respondents with a health decline were aged from 55 to 85 at T1 (M = 72.9), and 159 had a partner.

Instruments

Health

We measured functional capacities with six questions about the activities of daily living, such as *"*Can you walk up and down stairs?*"* The five possible answers were *not at all*, *only with help*, *with a great deal of difficulty*, *with some difficulty*, and *without difficulty*. We summed the item scores to obtain a scale score ranging from 6 to 30 (Cronbach's α = .86). We measured cognitive capacities with the Mini Mental State Examination (MMSE; Folstein, Folstein, & McHugh, 1975) with scores ranging from 0 to 30.

Personal network

To obtain adequate information on the personal networks of the older adults they were asked to provide detailed information on their relationships and identify their network members by name. The main objective was to identify a network that reflects the socially active relationships of the older adults in the core as well as the outer layers of the larger network (Van Tilburg, 1998). Respondents identified network members in seven

domains: household members (including the spouse, if there was one), children and their spouses, other relatives, neighbors, co-workers, fellow club members (athletic, church, or political clubs), and others (friends and acquaintances). With respect to the domains, respondents were asked to ‘‘name the people (e.g. in your neighborhood) you have frequent contact with and who are important to you.’’ Individuals could only be named once, so an individual first named as a relative could not reappear as a neighbor. In using this procedure to elicit descriptions of networks, our focus was on personal relationships in general, including potential providers of support. Only people above the age of 18 could be named. Interviewers gathered information on all the network members with regard to the type of relationship they had with the respondent. Each network member, child, nephew, neighbor or co-worker, was assigned to one of two mutually exclusive partial networks, the core network of kin and friends and the peripheral network of other non-kin. The sizes of these partial networks at T1 were on average 8.4 (range 0-25; SD = 5.2) and 4.4 (range 0-23; SD = 3.9).

Loneliness

The De Jong Gierveld Loneliness Scale measured the intensity of feelings of loneliness (De Jong Gierveld & Kamphuis, 1985). Two subscales were derived from this scale, social loneliness and emotional loneliness (Weiss, 1973). Five positive items were related to the feeling that one can count on others for help and support and a sense of social embeddedness (e.g. “There are enough people I feel close to”). The items described social loneliness (Loevinger’s coefficient of homogeneity H = .43, ρ = .73). Six negative items were related to the lack of reliable attachments to others and the feeling of being emotionally isolated (e.g. “I often feel rejected”). These items assessed emotional loneliness (H = .47, ρ = .81). The items had three response categories: *no*, *more or less* and *yes*. Sum scores of the dichotomized items were from 0 to 5 and from 0 to 6 respectively. Average scores at T1 were 0.9 (SD = 1.4) and 1.4 (SD = 1.8) respectively.

Control variables

A socio-economic status index had been constructed on the basis of education, level of occupational skills, occupational prestige (based on coding devised by Sixma and Ultee, 1983) and household income. If one of the scores on the first three variables was missing or lower than the score of the partner/spouse, the latter was taken. The four scores had high intercorrelations (average r = .62; Cronbach’s α = .87). The scores were transformed to ranges from 0 to 33, 17, 17, and 33, respectively, and summed to create one index with a range from zero to hundred. We measured the level of urbanization in five ordinal classes, ranging from not urban (less than 500 addresses

per square kilometer) to highly urbanized (more than 2,500 addresses; M = 3.1, SD = 1.4). We derived these data from a database provided by Statistics Netherlands (Den Dulk, Van de Stadt, & Vliegen, 1992).

Procedure

We assessed whether the 263 respondents moved after T1. For each respondent we had T2 observations available, and additional T3 and T4 observations were available for 180 and 106 respondents respectively. For respondents who had moved (34 moved to regular housing, 39 to adapted housing and 35 to a residential care facility or nursing home), we selected the first observation after the move. We also selected observations before the move. For respondents who had not moved (*n* = 165) we selected all the available observations. We conducted multilevel regression analyses on data from the follow-up observations of T2 to T4 (*n* = 550), taking into account the baseline observation for the dependent variables, network size and loneliness. The results are presented in Table 2. The descriptives presented in Table 1 were derived from the multilevel regression estimates.

Table 1. Descriptives: Network size and loneliness after a move[a]

	Number of Core relationships 0 – 30 (M = 8.24)		Number of Peripheral relationships 0 – 26 (M = 4.62)		Social loneliness 0 – 5 (M = 1.07)		Emotional loneliness 0 – 6 (M = 1.58)	
	Before	After	Before	After	Before	After	Before	After
Regular	8.03	8.20	5.12	4.48	0.88	1.35	1.38	1.50
Adapted	9.10	8.84	4.10	3.77	0.97	0.97	1.76	1.65
Care setting	9.19	9.45	4.13	4.49	0.34	0.72	1.06	0.89
Not moved	8.13	8.10	4.34	4.49	1.01	1.10	1.30	1.65

Note. [a]Taking into account the baseline observation for the dependent variables.

Table 2. Multilevel linear regression of number of core relationships, number of peripheral network relationships, and social and emotional loneliness

	Number of Core relationships (0-30)			Number of Peripheral relationships (0-26)			Social loneliness (0-5)			Emotional loneliness (0-6)		
	B	SE B	*t*	B	SE B	*t*	B	SE B	*t*	B	SE B	*t*
Constant	7.16	2.76	2.6**	7.20	2.12	3.4***	-0.36	0.74	-0.5	-0.90	0.95	-0.9
T1-observation	0.45	0.04	10.4***	0.46	0.05	9.9***	0.59	0.05	12.4***	0.57	0.05	12.1***
Female	0.44	0.50	0.9	0.72	0.38	1.9	-0.20	0.14	-1.4	0.05	0.17	0.3
Age at T1 (55-85 years)	-0.03	0.03	-1.1	-0.08	0.02	-3.3**	0.01	0.01	1.4	0.02	0.01	2.2*
SES at T1 (5-89)	-0.03	0.01	-2.1*	0.01	0.01	1.4	0.01	0.00	2.1*	0.01	0.00	1.2
Partner	1.34	0.53	2.5*	0.03	0.39	0.1	-0.09	0.14	-0.7	-0.59	0.18	-3.2**
Urbanization (1-5)	-0.23	0.15	-1.5	-0.14	0.12	-1.2	0.04	0.04	1.1	0.02	0.05	0.4
- To regular housing	0.10	0.83	0.1	-0.05	0.59	-0.1	0.26	0.20	1.3	-0.15	0.27	-0.6
- To adapted housing	0.75	0.84	0.9	-0.80	0.60	-1.3	-0.11	0.21	-0.5	-0.01	0.28	0.0
- To care setting	1.41	1.36	1.0	-0.53	0.97	-0.5	-0.28	0.25	-1.1	-0.81	0.33	-2.4*

Note. n = 263 respondents and 550 follow-up observations.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Chapter 4

Changes in older Dutch adults' role networks after moving

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Abstract

Using the convoy model (Kahn & Antonucci, 1980), this study examined the differential impact of relocation, depending on the distance moved, on the size of three types of role networks. A total of 890 Dutch non-movers and 445 movers (aged 55 - 86) were selected from the Longitudinal Aging Study Amsterdam. Results of analyses of variance showed that the neighbor networks changed most after relocation. Long-distance movers discontinued the largest number of relationships with fellow club members. As expected, moving did not affect co-worker networks. The findings show that, consistent with the convoy model, role networks proved to be unstable. Older adults, however, restored their partial networks at the second observation by starting new relationships.

Introduction

Social networks change over the life course. According to the convoy model (Kahn & Antonucci, 1980), a social network consists of a variety of accompanying and supporting individuals who surround people from childhood to old age. Given that needs and circumstances change as people move through the life course, the composition of the convoy changes as well, for example when people move. Knowledge about how moving changes the social networks of older adults is limited. We do not know of any empirical studies on network changes using the convoy model. Most studies that used the model in relation to older adults have examined patterns of social support (Antonucci & Akiyama, 1987; Hogan & Eggebeen, 1995) or have studied the effects of other life events such as health changes (Stoller & Pugliesi, 1991; Van Tilburg & Broese van Groenou, 2002) or widowhood (Guiaux, Van Tilburg, & Broese van Groenou, 2007) on network changes. One study focused on changes in relationships after several life events including moving, but not specifically among older adults (Wellman, Wong, Tindall, & Nazer, 1997). Another study devoted attention to relocation, related to changes in relationships, but studied close relationships and found that moving hardly changed old friendships (Shea, Thompson, & Blieszner, 1988). Klein Ikkink and Van Tilburg (1999) showed that relationships that were less emotionally close were more susceptible to change. The present study focuses on changes in emotionally distant relationships in a population of older adults after moving. There was no indication of a specific trajectory of moves associated with consecutive life events in late adulthood (Bloem, Van Tilburg, & Thomése, 2008a). This makes it easier to attribute changes in relationships to the move itself than in a younger population.

Moving draws a distinct line in time; social networks before and after a move are clearly different. In many cases, moving decreases the size of the social network because people lose contact with relationships connected to their former living environment. A decreased number of relationships may, however, coincide with gains. A new living environment challenges people to make new commitments and new relationships compensate for old ones that have ended. In addition to loss, we study whether older adults succeed in rebuilding their social network, and address the extent to which new relationships take the place of the lost old ones. We used a Dutch longitudinal sample in which older adults described their personal networks. Using a longitudinal design enabled us to study networks before and after moving, and compare them to changes in the networks of non-movers.

The convoy differentiates the core from the role network. The core network consists of relationships close to the focal person and the role network of more distant relationships, usually linked to specific settings such as the neighborhood or work

place. Network members interact with the focal person via the exchange of support. We use the concept of support exchange to describe the greater vulnerability of some relationships to discontinuation. The underlying principle of exchange is that individuals give and receive benefits on the basis of reciprocity. If people give help, they generally expect comparable compensation relatively soon (Mills & Clark, 1982). Compensation therefore keeps the relationship in balance. It follows that when individuals fail to reciprocate, relationships become imbalanced and are more likely to be discontinued (Thomése, Van Tilburg, & Knipscheer, 2003).

Discontinuation depends, however, on the type of relationship (Wellman & Wortley, 1990). Mills and Clark (1982) draw a distinction between communal and exchange relationships. In communal relationships, exchange stems from a sense of concern and responsibility, and in exchange relationships, exchange creates an obligation to return a comparable benefit. These two forms seem to be two ends of one continuum. As Blumstein and Kollock (1988) noted, the two types of relationships only differ in their accounting systems. In exchange relationships the accounting system is fine-grained and it needs to be in continuous balance, otherwise there is a risk of discontinuation. In communal relationships, where the accounting is coarser, imbalance for lengthier periods of time is not a barrier to continuation. This division in types of exchange and balancing applies to core and role relationships. In the core network, strict balancing is less of an issue than in the role network.

Core relationships are typically with a spouse, relatives and close friends. Kahn and Antonucci (1980) noted that core relationships are based on attachment or emotional closeness and go beyond the boundaries of roles. Attachment makes the core network relatively stable. Emotional closeness or an intimate bond can sometimes differentiate close relationships from more formal or peripheral ones such as many role relationships. But neither the presence of intense emotions nor their positive nature is a sure sign that a relationship is close or stable. Some close relationships are rather negative or lack intimacy (Blumstein & Kollock, 1988). Blumstein and Kollock (1988) defined a close relationship as one with a large amount of interdependence and one that lasts a considerable length of time.

The convoy model assumes role relationships to be more subject to change than core relationships. In role relationships, behavior between individuals follows role demands (Auhagen & Hinde, 1997). People interact as interchangeable players of social roles. Successful participation in role relationships requires knowledge of institutionalized roles and their interrelationships, but does not require information unique to the individuals playing the roles (Blumstein & Kollock, 1988). Role relationships serve a purpose. In other words, people begin and maintain relationships to exchange practical benefits, usually mutual assistance, and to perform joint activities. Role relationships

are less likely to continue without reciprocal exchange, which makes role networks generally unstable and susceptible to changes. Role relationships are consequently not as long-lasting as core relationships.

Core relationships, however, vary in stability (Martire, Schulz, Mittelmark, & Newsom, 1999; Wellman et al., 1997) and not all role relationships are equally vulnerable to the effects of moving. In this study, we elaborate upon the convoy model with our own definitions and distinguish role relationships with neighbors, fellow club members and co-workers. We define the susceptibility to change on the basis of three characteristics: to what extent are the relationships linked to the neighborhood, do the relationships begin more or less voluntarily, and is the exchange in the relationships more or less instrumental?

Role relationships with neighbors are most closely connected to the neighborhood, are rather inevitable, and begin more or less involuntarily. Relationships result from the shared place of residence and the common needs and interests that arise from living there (Thomése et al., 2003). In addition to friendliness and respect for privacy, the exchange of short-term practical help is at the heart of relationships between neighbors (Wenger, 1990). Although contact between neighbors begins involuntarily, they exchange help more or less voluntarily with reciprocity as prerequisite (Klein Ikkink & Van Tilburg, 1998). The exchange of practical help is easiest if people live nearby (Magdol & Bessel, 2003). Neighbor relationships will thus change when people move. If they move outside the neighborhood, many neighbor relationships are apt to end. We first hypothesize that the longer the distance moved, the more probable it is for neighbor relationships to end. If people only move a few blocks away or to an adjoining neighborhood, they are apt to continue their contact with a number of their former neighbors. Their relationships with former neighbors, however, are lost if they move farther away.

Role relationships with fellow club members are not necessarily connected to the neighborhood. An important reason for joining a club is to have contact with others (Dykstra, 1995). For the purpose of contact, the location of the club is of minor importance, although we can assume that people primarily look for a club in the neighborhood. In addition to the exchange of practical help, contact among fellow club members includes the exchange of information, skills and support, as found in a study of volunteer involvement (Prestby, Wandersman, Florin, Rich, & Chavis, 1990). The exchange of support in relationships with fellow members thus seems less instrumental than in relationships with neighbors. Reciprocity may be less important as well, as Searle (1989) concluded in a study of relationships in clubs. As in neighbor relationships, we expect more changes to accompany a greater moving distance. Our second hypothesis is that the longer the distance moved, the more likely relationships

with fellow club members are to end. Compared to the first hypothesis on neighbor relationships, we expect fewer changes in relationships with fellow club members than with neighbors. Given that relationships with fellow club members begin voluntarily and participation itself is intrinsically rewarding (Auld & Case, 1997), we assume older adults to have a stronger motivation after moving to continue them than to continue relationships with neighbors.

Role relationships with co-workers are least linked to the neighborhood. For contact purposes, it is not important whether the work place is in the immediate neighborhood or farther away. This limited dependency on location means work-related relationships resemble the contact with fellow club members. They also resemble neighbor relationships, because the contact begins involuntarily as a result of sharing a work setting, and continues more voluntarily. Interaction with co-workers varies from an exchange of support with regard to work-related matters to working on friendly footing. People talk about work-related issues, help each other with work-related tasks (Flynn & Brockner, 2003), or discuss personal matters. Not infrequently, contact with former co-workers continues after retirement (Van Tilburg, 2003). Knowledge about the mechanisms of continuation and change in relationships with former co-workers is limited (Moen, Fields, Quick, & Hofmeister, 2000). Retirees' contact with former co-workers might rely on a shared history. The shared role becomes a shared past, making this type of relationship even less sensitive to changes in role setting or location. Our third hypothesis is that regardless of the distance, a move does not change relationships with co-workers and former co-workers.

Lastly, moving not only decreases the number of relationships, it can also increase it. Unless people move to an isolated area, a new neighborhood inevitably provides opportunities for contact with new network members. As Fischer (1982) noted in an adult sample, long-distance movers are particularly apt to develop a network by making contact with new neighbors. Older adults who discontinue relationships with fellow club members after moving may develop new relationships after joining another club at their new location. According to continuity theory (Atchley, 1989), individuals seek to maintain role stability throughout the life course. Although individuals experience changes that might occasionally be disruptive, they try to preserve behavior, attitude and preference continuity throughout their life course (Utz, Carr, Nesse, & Wortman, 2002). In terms of this study, we expect older adults to restore their network structure by starting new relationships to compensate for the lost ones. Accordingly, our fourth hypothesis is that a discontinuation of former role relationships accompanies replacement with new ones.

To summarize, after moving, we expect the least continuation in the network of neighbor relationships, more in the network of fellow club members, and the most in

the network of co-workers. The longer the distance moved, the higher the number of discontinued relationships will be. Furthermore, we expect older adults to develop new relationships to compensate for the lost ones. Given that relationship changes also occur in the natural course of life, we compare a group of movers with a group of non-movers to determine whether the move is the driving force behind the changes.

Finally, two typically Dutch characteristics may play a role in the interpretation of our results. The Netherlands is one of the smallest and most densely populated countries in the world. The distance from the Dutch west coast to the eastern border is about 150 kilometers, which takes about an hour and a half by car. With a total population of 16 million people, the country has a population density of 483 people per square kilometer (National Institute for Health and the Environment, 2007), compared to 80 in the United States (U.S. Census Bureau, n.d.). In addition, low mobility characterizes the Dutch housing market. The annual percentage of movers is around 10% of all the households in 2000-2005 (Statistics Netherlands, 2007), as compared to about 14% in the United States (U.S. Census Bureau, 2006). Among adults older than 50 years these percentages are about two thirds lower in both countries.

Method

Respondents

In 1992 (T0), interviewers questioned 3,805 respondents as part of the Living Arrangements and Social Networks of Older Adults research program (LSN; Knipscheer, de Jong Gierveld, Van Tilburg, & Dykstra, 1995), which used a stratified random sample of men and women born between 1908 and 1937. The oldest individuals, particularly the oldest men, were over-represented in the sample, which resulted in approximately equal numbers of males (n = 1,859) and females (n = 1,946). The majority was married (63%); 6% never married, 5% were divorced, and 25% were widowed. The sample was drawn from population registers of eleven municipalities: the city of Amsterdam and two rural communities in the west of the Netherlands, one city and two rural communities in the south, and one city and four rural communities in the east. These regions represented the differences in religion and urbanization in the Netherlands at the time. Of the 6,107 eligible individuals in the sample, 2,302 (38%) refused to cooperate due to a lack of interest or time, and another 734 were ineligible because they were deceased or too ill or cognitively impaired to be interviewed. In 1992-1993 (T1, N = 3,107), 1995-1996 (T2, N = 2,545), 1998-1999 (T3, N = 2,076) and 2001-2002 (T4, N = 1,691, 44% of the T0 respondents), follow-ups were performed in the context of the Longitudinal Aging Study Amsterdam (LASA; Deeg, Beekman, Kriegsman, & Westendorp-de Serière, 1998). Between T0 and T4, 38% of the respondents died, 4%

were unable to participate in the study because of severe physical or mental health problems, 13% refused to have another interview, and 2% moved to another country or to an unknown address. In each wave, the interviewers received a four-day training course and the LASA field work manager supervised them intensively. The interviewer tape-recorded the interviews to monitor and enhance the quality of the data obtained. The interviews took between an hour and a half and two hours.

In the first step, we selected a sample of movers (*n* = 736) from the observations T2–T4; we excluded 213 respondents who moved to a care facility and four respondents who moved abroad from the sample, because our focus was not on this type of moving. Longitudinal data on the personal network were missing for 74 respondents, and we excluded them from the analyses. We matched each of the 445 movers to two non-movers to enhance the study of changes in partial networks after moving. We considered matching non-movers successful only if the respondents did not move during the observations, had the same gender as the mover, and the age difference between them and the movers was no more than five years. The sample for the analyses consisted of 445 movers and 890 non-movers. A total of 159 of the movers moved within the neighborhood, 157 moved outside of the neighborhood, but in the same town, and 129 moved outside of the town. Movers and non-movers lived independently at baseline and were between the ages of 55 and 86 (M = 69.8, SD = 7.9).

Measurements

Moves

At each observation, we examined the respondent's address to see whether he or she had moved in the preceding three years. For multiple movers (*n* = 107), we took the observation after the first move into account along with the previous observation. We categorized moves according to the distance, which was determined on the basis of the postal code as well as on town boundaries; using only one would give a biased view, given that both vary in size. We based the number of kilometers on this information. We subsequently distinguished moves within the neighborhood, or local moves, from moves outside the neighborhood but in the same town (an average distance of 2.5 kilometers between the centers of the neighborhoods), and from moves outside the town but in the country, or long-distance moves (an average of 42.3 kilometers to a maximum of 244 kilometers).

Personal network

To obtain adequate information on the personal networks of the older adults, they were asked to provide detailed information on their relationships and identify their network members by name. The main objective was to identify a network that reflects the socially active relationships of the older adults in the core as well as the outer layers of the larger network (Van Tilburg, 1998). Respondents identified network members in seven domains: household members (including the spouse, if there is one), children and their spouses, other relatives, neighbors, co-workers, fellow club members (athletic, church or political clubs), and others (friends and acquaintances). With respect to the domains, respondents could "name the people (e.g., in your neighborhood) you have frequent contact with and who are important to you". People could only be named once, so a person first named as a relative could not reappear as a neighbor. In using this procedure to elicit descriptions of networks, our focus was on personal relationships in general, including potential providers of support. Only people above the age of 18 years could be named. Interviewers gathered information on all the network members with regard to the type of the relationship with the respondent. The type of network member, for example, neighbor, fellow club member or co-worker, pertained to three mutually exclusive partial networks. We defined neighbors as people who live nearby and who are identified as neighbors, or as people known from the neighborhood; fellow club members include people known via various kinds of voluntary clubs; co-workers include not only people known via jobs or former jobs, but also the spouse of a co-worker or former co-worker. For detecting changes in the network composition, we compared the names of all the network members in the various observations and linked them where possible.

Control variables

Given that changes in the partial network size could be associated with characteristics other than moving, we controlled for several variables after we controlled for moving. First, we controlled for network size because older adults with a larger network have larger partial networks. We computed network size as the number of individuals identified, not including the spouse (range 0 – 61, M = 14.0, SD = 8.5). Second, we included having a spouse because people with a spouse have different networks than people without a spouse; in the analyzed sample, 63% were married. Third, we measured functional capacities with six questions about the activities of daily living, such as "Can you walk up and down stairs?" The five possible answers were *not at all*, *only with help*, *with a great deal of difficulty*, *with some difficulty* and *without difficulty*. We summed the item scores to obtain a scale score (range 6 – 30, M = 27.0, SD = 4.5). Fourth, respondents could be involved in clubs (e.g., sports, cultural or

senior citizens') or voluntary organizations (e.g., union or church). We summarize the variety of activities as involvement in clubs, which we assessed by a question about a list of thirteen types of clubs: "Can you tell me if you are in one or more of these clubs? I mean that you are a member or put effort into one or more of these clubs". The large majority (76%) was in one or more clubs, usually church-related. Fifth, paid employment was assessed. Part-time jobs were as important as full-time jobs because they both give access to relationships with co-workers; before moving, 9% of the respondents had paid employment, and 4% were retired during the period between the time of measurement before they moved and the time of measurement after they moved. Sixth, we measured the level of urbanization in five ordinal classes, ranging from *not urban* (less than 500 addresses per square kilometer) to *very urban* (more than 2500 addresses; M = 3.1, SD = 1.4). We derived these data from a database provided by Statistics Netherlands (Den Dulk, Van de Stadt, & Vliegen, 1992). Lastly, we assessed the number of years living in the neighborhood. Older adults had lived in the neighborhood for an average of 25 years before they moved, and this ranged from less than one year to 82 years (M = 24.6 years, SD = 16.4). We also included gender, age and educational level, which are time independent. Educational level was measured in years and ranges from 5 to 18 (M = 9.1, SD = 3.3). We extended the equations with a variable on the length of time between the observations before and after moving, ranging from 2.1 to 4.0 years (M = 3.0, SD = 0.2).

Procedure

In accordance with the hypotheses, we examined whether older adults continued, lost or gained relationships. We formulated four hypotheses, which we divided according to the types of partial networks, that is, neighbors, fellow club members and co-workers, and the acquisition of new relationships. Continuation and loss of relationships pertained to the first, second and third hypothesis, and new relationships to the fourth. We examined continuation to determine whether relationships actually remained in the network. A person could continue a relationship after moving in the same form, for example with a fellow club member, or as an acquaintance or friend, as is also possible with neighbors. In the analyses, the continuation of the contacts was examined and the form is of minor importance. A person could also lose relationships. We defined lost relationships as those identified before but not after moving. To compensate for discontinued relationships, older adults might start new ones. New relationships were defined as those identified after but not before moving.

To facilitate comparison, we converted the absolute numbers of relationships into percentages: Continued, lost, and new relationships were calculated as percentages of the partial network. The latter was computed as the number of unique network members identified at the observations before and after moving. Consequently, the

analyses pertained only to those who had identified relationships with neighbors, fellow club members, and co-workers. We conducted nine analyses of variance with the percentages of continued, lost, and new relationships for the three partial networks as dependent variables, and moving distance that included a category of non-movers as independent variable. The control variables were included as covariates. In a second analysis, we calculated mean sizes of the partial networks for all the respondents and compared before and after moving. Given that mean sizes indicate the direction of change, we were also able to test the fourth hypothesis; a positive change implied that older adults predominantly gained new relationships after moving.

Results

In the first hypothesis, we expected less continuation of neighbor relationships with a larger moving distance. A total of 991 of the respondents (74%, N = 1,335) had neighbor relationships before or after moving.

Table 1. Analysis of variance in the stability of partial networks after moving

Partial Networks	Did not move	In neighborhood	In town	Outside town	
	M[a]	M[a]	M[a]	M[a]	F
Neighbors					
n =	665	113	113	98	
Continued	38	21	16	12	30.41***
Lost	31	38	53	41	12.11***
New	31	42	31	47	7.58***
Fellow club members					
n =	408	78	68	46	
Continued	23	24	17	10	2.94*
Lost	36	36	44	53	3.02*
New	41	40	39	37	0.17
Co-workers					
n =	266	40	51	51	
Continued	31	31	34	28	0.23
Lost	36	32	38	40	0.27
New	33	37	28	32	0.39

Note. [a] Mean percentages, controlled for network size, spouse, functional capacities, club membership, employment, level of urbanization, number of years living in the neighborhood, gender, age, educational level and time.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 1 highlights the extent of change in detail, and the percentages sum up to 100 for each respondent. As Table 1 reveals, we observed the greatest instability in older adults' neighbor networks after moving. With a greater moving distance, fewer neighbor relationships continued. In general, the percentages of continuation in the neighbor network were small; over time, non-movers continued slightly more than one third of their relationships with neighbors, and movers continued one fifth or considerably less. After moving, older adults classified most continued relationships as former neighbor relationships. Of the 190 neighbors named before the move, only 34 continued in the friendship form after the move.

Table 2. Analysis of variance in the stability of partial networks: Unstandardized effects of control variables after moving (significant effects only)

Partial Networks	Network size (range 0-61)	Time (2-4 years)	Spouse (no-yes)	Functional capacities (6-30)	Urbanization (1-5)	Gender (female)	Employed (no-yes)
	B	B	B	B	B	B	B
Neighbors							
Continued	0.52***	12.68*					
Lost	-1.13***				-2.07*		
New	0.61***						
Fellow club members							
Continued				0.88**		2.67*	
Lost	-0.73***						
New	0.76***		-8.12*	-0.94*			
Co-workers							
Continued	0.45*						
Lost	-1.02***						
New	0.56**						14.41*

Note. Of the control variables, club membership, number of years living in the neighborhood, age and educational level show no significant effects and are therefore left out of the table.
* $p < .05$. ** $p < .01$. *** $p < .001$.

It follows that non-movers and movers have different partial network sizes after moving, and the differences depend on the moving distance. The longer the distance of the move was, the higher the percentage of discontinuation. The highest percentages of relationships lost came after a move in the town, which differs from our expectation. Table 2 shows the effects of the control variables. For all the partial networks, movers and non-movers with a large network after moving had a higher percentage of continued and new relationships and a lower percentage of lost relationships. This is an artifact of the analysis: People with a larger network after moving have the highest likelihood of

an increase in their network size. An additional finding is related to urbanization, which affects lost neighbor relationships: People in urban areas lost fewer relationships (8%) than people in rural areas. To summarize, we can confirm the first hypothesis for continued relationships but not for lost relationships.

As to the partial network of relationships with fellow club members, the longer the distance of the move, the less continuation we expected. As we noted above, older adults are more likely to continue these relationships because club membership starts voluntarily and generally continues for this same reason, and we therefore expected fewer changes in this partial network than in the neighbor network. A total of 600 of the respondents (45%) had relationships with fellow club members before or after moving. It is apparent from Table 1 that the instability in this partial network was smaller than in the neighbor network. There was a significant effect of moving distance on continued and lost relationships. The longer the distance of the move, the fewer the relationships that continued, but the difference between non-movers and movers was not as large as in the neighbor network. The percentage of lost relationships increased with the distance of the move. A closer look reveals that older adults are most likely to be active in clubs located in the neighborhood, such as senior, athletic or political clubs (not in the table). Of the control variables, spouse status had an effect given that people with a spouse initiated fewer relationships than people without one (Table 2). Health status after moving was associated with continued and new relationships. Compared to older adults in poor health, older adults who were in good health continued more relationships and started fewer new ones. Lastly, older women were more likely to continue relationships with fellow club members than men. The findings support the second hypothesis for lost and continued relationships.

Our third hypothesis was that a move does not change the partial network of relationships with co-workers and former co-workers. A total of 409 of the respondents (31%) had relationships of these types before or after moving. There was no significant effect of moving distance. Changes in the partial networks of movers did not differ from those of non-movers. These results thus provide evidence for the third hypothesis. Obviously, employed people initiated more relationships with co-workers than unemployed people.

Our fourth hypothesis was that the discontinuation of former role relationships coincides with the start of new role relationships. In the first three hypotheses, we expected variability in changes depending on the type of partial network. Accordingly, we expected more new relationships in the neighbor network and fewer in the co-worker network. The results meet this expectation regarding the networks of neighbors and co-workers but are less obvious with regard to fellow club members. On average, the sizes of the partial networks of local and long-distance movers in the neighbor network were larger after moving (Table 3).

Table 3. Analysis of variance on change in mean partial network size before and after moving (N = 1,333)

Partial Networks	Did not move	In neighborhood	In town	Outside town	
	M	M	M	M	F
n =	888	159	157	129	
Neighbors					
Before	1.8	1.4	1.7	1.4	3.18*
After	1.8	1.6	1.2	1.7	4.14**
Change	0.0	0.2	-0.5	0.3	4.35**
Fellow club members					
Before	1.1	1.3	1.2	1.0	0.82
After	1.1	1.0	1.1	0.7	1.73
Change	0.0	-0.3	-0.1	-0.3	2.04
Co-workers					
Before	0.6	0.5	0.6	0.7	0.66
After	0.5	0.5	0.5	0.7	0.54
Change	-0.1	0.0	-0.1	-0.0	0.26

Note. Controlled for network size, spouse, functional capacities, club membership, employment, level of urbanization, number of years living in the neighborhood, gender, age, educational level and time.
* $p < .05$. ** $p < .01$. *** $p < .001$.

The change in the neighbor network was largest for long-distance movers; the number of new relationships was considerably larger than the number of losses (Table 1). The neighbor networks of local as well as long-distance movers before moving, however, were already smaller than those of non-movers. The results for movers in town were less conclusive, given that the percentage of new neighbor relationships was smaller than that of lost ones. As a result, the mean network size was smaller after this type of move. In the networks of club members and co-workers alike, movers started as many new relationships as non-movers, and the mean change was close to zero (Table 3). We can interpret the latter result as support for the continuity theory. As regards the effects of moves, however, our findings do no support the fourth hypothesis.

Discussion

In this longitudinal study, the aim was to examine the role networks of older Dutch adults before and after moving. Based on the convoy model, we formulated expectations about changes in the size of partial networks of relationships with neighbors, fellow club members, and co-workers. The longer the distance moved, the greater the expected losses, with the extent of loss depending on the type of relationship. We expected the most losses in the neighbor network and the fewest in the co-worker network. Furthermore, we expected older adults to start new relationships to compensate for the lost ones. We used data on social networks and relocation from a representative study among older Dutch adults. We compared changes in the partial networks of 445 movers with those of 890 non-movers. The interval between the observations was an average of two to four years. In the discussion, we focus on the results in the neighbor network, as it is the one most affected by moving.

In accordance with the first hypothesis, the longer the distance moved, the fewer relationships continued in the neighbor network. It is conceivable that what few contacts are left continue in the form of friendship; neighbors who have known each other for years may become friends. It is, however, more likely that the frequency of contact will decline and stop altogether. Wenger (1990) noted that when neighbors move away, even in the same town, older adults often expect the contact to stop or to occur only by chance. Contact between neighbors is linked to the neighborhood and even local moves cause relationships to end because there is no longer adequate geographic proximity. Our method of network delineation enabled us to see whether older adults continue neighbor relationships in another form or end them altogether. Although non-movers also discontinued many neighbor relationships, a considerably higher percentage ended after moving.

The neighbor networks of long-distance and local movers after moving were approximately the same size as those of non-movers at the time. Prior to moving, however, their networks were smaller than those of other movers and non-movers, and this may be in anticipation of the upcoming move. Obviously, long-distance movers are aware of having fewer opportunities to meet with former neighbors after the move. It follows that they subsequently develop new relationships near their new home.

Fredrickson and Carstensen's (1990) social emotional selectivity theory provides an explanation for this process. They state that relationship selectivity is responsive to situational constraints, in particular constraints associated with anticipated social endings. They noted that anticipated social endings – people had to imagine moving across the country – influenced relationship selection. People apparently prefer to spend social time prior to moving with emotionally meaningful contacts, such as relatives and

long-time friends, rather than to instrumental contacts such as new acquaintances. Alternatively, as Fredrickson and Carstensen go on to state, if anticipated endings are not an issue, individuals develop new relationships. Investments in new relationships are valuable and, as they argue, yield long-term benefits, as is characteristic of exchange relationships.

This leads us to conclude in the present study that before local and long-distance movers move, they select specific relationships to end and thus reduce their network. Kahn and Antonucci (1980) hold that at the network level, the convoy changes at the expense of role relationships. At the relationship level, these changes fit in with notions of exchange and reciprocity characteristic of role relationships. As we noted above, reciprocal balance is necessary, particularly for the continuation of neighbor relationships. At the time of the move, relationships no longer benefit from reciprocal exchanges and older adults consequently withdraw from them.

After moving, older adults actively develop new relationships for the future without an anticipated ending. In particular, for local and long-distance movers, the neighbor network was unexpectedly larger after the move and more neighbor relationships were gained than lost. A larger network after a move is not uncommon; Starker, Morgan, and March (1993) observed a small network size growth in the first two years after a move as a result of the addition of new network members. This is not surprising given that newcomers need their neighbors to help them become acquainted with the neighborhood. It confirms that neighbor relationships begin involuntarily, as we noted in the introduction. At first, the contact is not in balance, as newcomers need their neighbors but the reverse is not true. As our respondents moved up to a maximum of four years before the interview, this newcomer effect cannot fully explain the observed growth of the neighbor network. It seems plausible that people have a greater preference for local relationships in a new living environment. They have probably chosen the new neighborhood voluntarily and if poor health or having to work all day is no restriction, a new neighborhood can be excellent breeding grounds for many new relationships that eventually become long-term.

These results pertained to local and long-distance movers, but surprisingly not to older adults who moved outside their neighborhood but to somewhere within the same town. These movers do not compensate completely for the loss of neighbor relationships by developing new ones. Their neighbor network thus remains smaller after moving than the networks of other movers and non-movers at the time. We cannot consider them as newcomers as they stay in relatively familiar surroundings. They thus do not need their neighbors as much as they get to know the new neighborhood, and it may be less necessary to develop new relationships. Furthermore, these middle-distance movers relocate over a relatively short distance and may intend to keep in

touch with their former neighbors. They nevertheless lose contact with many of their old neighbors, which means even a relatively short distance becomes an obstacle. It again confirms the idea that the continuation of neighbor relationships is highly dependent on geographic proximity.

This argument may not seem as important in the Dutch context, which is a small country, but instead close proximity appears to be all the more important. Travel distance restrains relationship maintenance significantly in the Netherlands (Klein Ikkink & Van Tilburg, 1999) as is found in any other study. The Dutch, however, may experience any distance, long or short, as far away because they are not used to traveling long distances. But even long distance moves are relatively short in the Netherlands, and differences between short and long-distance movers may be smaller compared to those in larger countries such as the United States, Canada, or the United Kingdom.

In the first instance, the findings on the partial relationship networks of fellow club members were not consistent with our expectations. Older adults discontinued many of their relationships with fellow club members when they moved a longer distance. A closer look reveals that older adults' favorite clubs are generally located in the neighborhood. A long distance move probably makes it difficult to keep attending a club. Older adults are thus less likely to continue their membership and contact with other club members. It appears that the continuation of this contact depends more on geographic proximity and less on motivation than we originally assumed. The extent of loss and replacement by new relationships among movers was as large as among non-movers.

We also observed that older women continued more relationships with fellow club members than older men. Studies generally show that men have higher rates of club membership than women (Dykstra, 1995; Moore, 1990). For older women, who are more frequently church members (Dykstra, 1995), church is an important avenue of social participation. Women not only acquire relationships by attending services but also by joining the choir or doing church volunteer work. Given that these activities are often locally based, in future research it would be interesting to explore whether church membership prevents older women from moving and, if they move, how they adapt afterwards. The findings showed that relationships with fellow members are generally susceptible to changes.

A move did not affect relationships with co-workers and former co-workers, as we expected. The changes in this partial network were as large among movers as among non-movers, indicating that moving does not account for the changes. This supports our hypothesis. We should note, however, that most of our sample already left the workforce at baseline. This means the partial network we identified mainly consisted of relationships not directly linked to the workplace. Work status as a control variable

did not affect the loss or continuation of work-related relationships. This is in keeping with our assumption that the mechanism underlying effects of moving is similar for present and former work relationships. We have not tested this assumption, however, and with the high number of retired respondents in our sample, care should be taken in generalizing this finding to younger populations more active in the work force.

It might be more plausible in retrospect to assume that the continuation of a work relationship after retirement unlinks it from the role context and brings it closer to core relationships, which rely more on intrinsic characteristics such as a shared history. About one third of the former co-workers disappear from the network after retirement, and about one third of the work-related contacts end for other reasons (Van Tilburg, 2003). Our research shows that the work-related relationships that do continue are not particularly affected by a major life event such as a move. It is unclear whether this kind of effect is typical of our older sample, where the motivation to maintain contact with former co-workers after retirement may be stronger than if new jobs generate opportunities for new work-related relationships. Future research could draw a more direct comparison between the mechanisms of maintaining work-related relationships among people who have and have not left their work settings.

To conclude, our findings grant insight into whether and how moving changes the partial role networks of older Dutch adults. The effects of specific life events such as moving have rarely been the subject of longitudinal research (Thomése, Van Tilburg, Broese van Groenou, & Knipscheer, 2005). In this respect, our study has a powerful design. Although we did not measure the exact timing of the moves, the interval between the observations, two to four years, is sufficient to document major changes in partial networks. Moreover, by comparing movers to non-movers, changes in partial networks more solidly indicate moving as the dominant process.

As expected, relationships with neighbors were the most susceptible to effects resulting from moving, followed by those with fellow club members. Not only did the role networks of movers show considerable change, non-movers also exhibited ample turnover in their networks. The instability of the composition might reflect the natural circulation in the membership of role networks (Starker et al., 1993; Van Tilburg, 1998). In terms of the convoy model, moving is one of many life course changes that elicit changes in the role network. Limitations in our design and the complexity of our current model made it impossible to analyze other life events in greater detail, such as retirement, the last child leaving home, or health changes.

Our findings also demonstrated that movers and non-movers alike usually compensate for a loss of relationships. They seem to easily accommodate in a new environment, and thus keep a form of continuity in their network. It confirms the general assumption of the continuity theory that, as noted in the introduction, people

continue old habits in new lives (Atchley, 1989). Among the non-movers as well, the main tendency was to replace lost relationships with new ones. Practical implications of these findings point to the resilience of older adults. Moving does not seem as disruptive as is usually taken for granted. Even though neighbor networks contract in anticipation of moving, older adults generally develop new relationships near their new residence without any help. Similarly, interventions aimed at decreasing feelings of loneliness among older adults do not always have effect and people not involved in an intervention initiate new relationships in a natural way (Fokkema & Van Tilburg, 2007). Rather than targeting older adults directly, it may make sense to focus on supporting older adults' own initiatives and resilience by providing opportunities to meet people, such as meeting places in public space and recreational or educational activities.

Older adults generally replaced lost by new relationships. We were, however, unable to relate this pattern of continuity specifically to neighbor relationships after moving, where different types of moves yield a diverse pattern of losses and gains. In its reliance on personal needs and opportunities, the convoy model offers better instruments to define and map circumstances that contribute to the development of a social network after moving. The process of adjusting to a new environment and the ease with which older adults acquire network members are issues for future research. The convoy model can help define areas of continuity and discontinuity in greater detail.

The convoy model enables us to specify how and why moving affects specific parts of the personal network. The perspective is not totally new, but it represents a rare effort to link network change theoretically to personal change and structural societal conditions (Thomése et al., 2005), as we did by adopting a role perspective. It may be argued that a role perspective does not do justice to the role of networks in 21st-century society. Personal relationships are becoming more personal, less determined by role requirements, and more individualized (Allan, 2001), and the link between roles and relationships is increasingly diffuse. Instead of an anomaly, the special role of former co-workers in the network might be an indication of changes in how personal networks are connected to the wider social context. It does not, however, negate the relevance of the role perspective. Roles and role settings continue to be an important context for personal relationships that differ from the closer core relationships (Wellman, 1979). This could be more the case for older than younger adults. Societal roles structure the lives of older adults more than those of younger adults, and former roles determine more of their peripheral networks. Older adults are, for example, more likely to join voluntary clubs than younger ones (Curtis, Grab, & Baer, 1992).

Although the convoy model is an elegant framework for modeling the process of network change, we cannot ignore the impact of the media on relationship

maintenance. The data in this study did not include the answers to questions about the use of computer technology to communicate with network members, but its penetration among older adults was very low throughout most of our observation period. The use of computer technology might change the impact of moving (Hampton & Wellman, 2001) by creating new relational options. The effects we observed among neighbors and fellow club members corroborate the importance of location for maintaining these role-based relationships. This will, however, inevitably change as future older adults increasingly rely on the Internet and email. Modern communication media allow for intense long-distance exchanges between more people. This observation is related to our previous suggestion that the impact of life events on network composition is embedded in a historical context. More importantly, when viewing the links between personal and network change and societal conditions in the convoy model, we need to remember that societal conditions are also changing.

Chapter 5

Starting relationships with neighbors after a move later in life: An exploratory study

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Abstract

We examined eight personal and contextual conditions associated with starting new relationships with neighbors after short and long-distance moves. A total of 625 Dutch movers and 1,936 non-movers (57-93 years old) were selected from the Longitudinal Aging Study Amsterdam. OLS linear regression analyses showed that short-distance movers mainly started relationships with neighbors when they did volunteer work. Long-distance movers who moved to rural areas and felt safe in their new neighborhood, or moved to areas with lower priced homes also started new relationships with neighbors. Contextual conditions appear to play a larger role than personal ones, especially after long-distance moves.

Introduction

Using a unique longitudinal study on Dutch older adults who live independently (Huisman et al., 2011), we explore the personal and contextual conditions that play a role in new relationships with neighbors after a move later in life. To our knowledge, no research has been conducted on the conditions contributing to the development of these relationships, but we know that many relationships with neighbors are lost and replaced after a move (Bloem, Van Tilburg, & Thomése, 2008b), and that older adults establish new relationships after important life events (Lamme, Dykstra, & Broese van Groenou, 1996). We assume new relationships not only depend on personal conditions, but also on contextual ones. Personal conditions derive from the relationship partners themselves, such as gender, age, marital status and health. Contextual conditions derive from the social and physical context in which the relationship exists (Sias & Bartoo, 2007). The context entails opportunities for interaction during local activities such as walking or volunteering, or specific characteristics of a neighborhood that facilitate or inhibit interpersonal interaction such as safety or degree of urbanization. Neighborhood characteristics can be relevant to developing relationships with neighbors, who are closely linked to the social and physical residential environment.

Neighborhood and neighbors

We conceive of a neighborhood as more than the few blocks around the home. Following Statistics Netherlands (1991), we define neighborhoods as spatial units considered entities on morphological or socio-economic grounds distinguishing them from other spatial units. The identification of neighborhood boundaries is often difficult because various spatial and interactional patterns characterizing a neighborhood such as social networks and interaction or the distribution of social characteristics may not have one clear boundary (Sampson, 2004). In 2010, the average population of the approximately 1,000 neighborhoods in the Netherlands was 1,439, with a standard deviation of 2,040 and a range from 0 to 26,680. Dutch neighborhoods differ from those in the United States because the Netherlands is one of the world's most densely populated countries with a high degree of urbanization. As a result, the Dutch do not have to travel as far as Americans to visit people they know.

In this study we did not provide respondents with a definition of the neighborhood. We assume that people generally experience the unit they live in as their neighborhood. Based partly on its size, people have different ideas though on the identification of their neighborhood (Kaal, Vanderveen, & McConnell, 2008): some neighborhoods are small, others are larger. Although physical proximity is the strongest predictor of starting relationships with neighbors (Hipp & Perrin, 2009), people might view others

who don't live in their neighborhood as locals if they live in an adjoining neighborhood and the geographical distance is small. The term neighborhood is rooted in the verb neighbor (Smith, 2010). "To neighbor" expresses the essence of neighborhood, because it refers to the neighborhood or vicinity of other people as well as the content of neighbor relationships. Neighbor relationships are diverse and typically consist of small talk, chatting about neighborhood matters, lighter forms of instrumental help, and the exchange of small items (Thomése et al., 2003; Lelieveldt, 2004).

For several reasons, neighbors are important to older people who move. First, after the move, neighbors serve as a source of all kinds of knowledge, such as up-to-date information on neighborhood activities or how to locate necessary resources (Unger & Wandersman, 1985). So older adults who move can get to know their new neighborhood through their neighbors. Second, neighbors can be a source of help in all kinds of situations, lending tools, taking care of pets and plants during vacations, or giving support in emergencies, for example, providing a ride to the first aid post after an accident (Litwak & Szelenyi, 1969). Third, neighbors are an important part of older adults' networks (Cornwell, Laumann, & Schumm, 2008); especially for frail older persons, neighbors are a source of contact and social support (Barker, 2002). A Dutch study by Brekelmans (2008) revealed that older adults are the smallest group (4%) of the people who do not meet or know their neighbors, and the largest group (39%) of those with a key to the neighbor's house. Neighbors are even more important to older people than friends or fellow members of their organizations (Gray, 2008).

Moving and neighbor relationships

Neighbor relationships can change, especially when people move (Wellman, Carrington, & Hall, 1988). Research findings among younger groups show inconsistencies. Van Busschbach (1996), for instance, observed a short and long-term decline in the frequency of contact with neighbors after a move. Other researchers observed no indication of the discontinuation of informal social relationships in the neighborhood after a voluntary or involuntary move. In one study, female movers exhibited heightened social interaction in the new place of residence shortly after the move (Butler, McAllister, & Kaiser, 1973), and another study revealed that older adults who moved after their spouse died did start new neighbor relationships (Lamme et al., 1996).

We use the social convoy model of Kahn and Antonucci (1980) to explain the formation of new relationships after a move. The convoy model is a lifespan developmental model of social networks and social support based on role and attachment theories. Each person moves through life surrounded by a convoy, which is a set of people he or she is related to via an exchange of social support. The convoy

is conceived as concentric circles representing different levels of closeness to the focal person. The closer relationships in the inner circle, the core relationships, are mostly determined by attachment (family and friends). The relationships in the outer circles, role relationships, are determined more by role requirements usually linked to specific settings such as the neighborhood or work place. Given that needs and circumstances change as people move through life, the composition of the convoy changes as well, for example with health decline or the loss of a spouse. Neighbor relationships are typical role relationships primarily linked to the role setting, which limits their duration. A change in the role setting, such as a move, means the discontinuation of the contact with former neighbors and possible replacement by similar others near the new home. Given the importance of neighbors to older adults, the continuity theory (Atchley, 1989) predicts that older adults will start new neighbor relationships after they move. The continuity theory states that older adults maintain the same activities, behavior and relationships they had earlier in life. In terms of this study, we expect older adults to restore their network structure by starting new neighbor relationships to compensate for the lost ones.

Conditions

We explore a number of personal and contextual conditions covering a variety of behaviors and opportunities below. We focus on opportunities for meeting people, and on older people's ability to take advantage of these opportunities. People need to spend enough time in their neighborhood and wider residential area to meet others, and there has to be a sufficient number of people in the area who are eligible as relationship partners (Völker & Flap, 2007).

Personal

An important condition for developing new relationships with neighbors is the ability to go out and meet people. Health issues can make this difficult (Bukov, Maas, & Lampert, 2002), especially sensory problems, which are common in an older population. Crews and Campell (2004) studied hearing and visual impairments, and reported that older people with a hearing loss find it difficult to engage in activities and have contact with others. Poor hearing, the first condition, may be a barrier to going out on the street, attending meetings, and talking to people one might become acquainted with.

Health issues can also make it hard to engage in physical activities, the second condition, such as gardening, bicycling or walking. Bicycles are widely used in the Netherlands as a means of transportation, for shopping, or for bike rides and sports. The main activities of older Dutch adults are walking and bicycling (Dutch Council of Recreation, 2003), and the urban and rural areas in the Netherlands have more

adequate bicycle paths than the United States (Pucher & Buehler, 2008). Dutch people above the age of 75 make roughly half their trips on foot or by bike (Pucher & Dijkstra, 2003).

A third condition is proximity to adult children, which is an important reason for older people to move (Longino, Bradley, Stoller, & Haas, 2002). Although adult children do not provide as many opportunities for social interaction as young children would (e.g. schools or playgrounds), children living in the new neighborhood can help their newly arrived parents get acquainted with neighbors from the child's network, who in turn can facilitate other relationships with neighbors.

Contextual

Good places to meet like-minded people are athletic, cultural, or senior citizens' clubs, churches or voluntary organizations, such as unions or political parties, where people from the vicinity participate, the fourth condition (Bloem et al., 2008b). Older adults spend more time doing volunteer work than younger adults (Mellor et al., 2008), and this is particularly true in the church context (Van Willigen, 2000). Isham, Kolodinsky and Kimberly (2006) showed that adults benefit socially from actively doing volunteer work in organizations, and this is probably true of older adults as well.

Fifth, older adults may move to adapted housing, such as homes in the community with special adaptations. Older adults move there if they need more support or care, are in poor health, receive insufficient help from children in the immediate vicinity (Litwak & Longino, 1987), or if their spouse dies (Bloem, Van Tilburg, & Thomése, 2008a). It may be easier to start new neighbor relationships because they are surrounded by peers there.

As to the availability of potential neighbors, neighborhoods differ as regards opportunities for socializing. Perceptions of unsafety in the neighborhood, the sixth condition, may keep people from going out, in particular on foot or by bicycle, and make it less likely for them to take part in activities or meet others on the street (Silverman & Kennedy, 1985; Van Lenthe, Brug, & Mackenbach, 2005). Fear of crime appears to be a better predictor of physical inactivity than actual crime rates (Sooman & Mcintyre, 1995), and older adults are particularly apt to feel unsafe (Foster & Giles-Corti, 2008).

Urbanized areas have numerous amenities that draw people into town (Thomése & Van Tilburg, 2000); grocery stores, libraries, medical centers and restaurants are easily accessible because distances are short and transportation facilities good (Logan & Spitze, 1994). People are drawn to more activities outside the immediate vicinity than is the case in rural settings. This suggests that older people in urban areas focus less on their neighbors (Blokland-Potters, 2003) than in rural areas. We view the degree of urbanization as the seventh condition.

Lastly, there may be differences as regards the economic level of neighborhoods. The eighth condition pertains to the price of homes, one of the strongest measures of economic level (Hipp & Perrin, 2009). People who are better off depend less on neighborly social support, and may be more accustomed to social activities at a variety of places outside the immediate vicinity (Wenger, 1991). This would make people in less wealthy neighborhoods more inclined to socialize with their new neighbors.

To summarize, we examine eight conditions in a longitudinal Dutch sample where older adults described their personal relationships: hearing impairments, physical activities, proximity to children, participation in organizations, adapted housing, feelings of safety, and the degree of urbanization and economic level of the neighborhood. Via the longitudinal design, we study the neighbor relationships before and after moving. Since relationships also change for other reasons, we compare a group of movers to a group of non-movers to isolate the effects of moving as the dominant process. In the control group of non-movers, we expect fewer changes. We also differentiate the moving distance, assuming that the greater the moving distance, the less likely it is that older adults will keep in touch with their former neighbors. Long-distance movers no longer share the amenities (e.g. athletic clubs, community centers, churches) in the neighborhood, and are less likely to run into their former neighbors by accident. Older adults have to look for new amenities in the new neighborhood, which can increase the likelihood of meeting their new neighbors there.

Method

Respondents

The data were from the Longitudinal Aging Study Amsterdam (LASA; Huisman et al., 2011). This program used a stratified random sample of men and women born from 1908 to 1937 that represented the older Dutch population. The oldest participants, particularly the oldest men, were over-represented in the sample, which resulted in approximately the same number of males and females. The sample was drawn from population records of eleven municipalities: the city of Amsterdam and two rural communities in the west of the Netherlands, one city and two rural communities in the south, and one city and four rural communities in the east. They represented the differences in religion and urbanization in the Netherlands at the time. The LASA sample was initially recruited for the Living Arrangements and Social Networks (LSN) of Older Adults research program (Knipscheer, De Jong Gierveld, Van Tilburg, & Dykstra, 1995). For the first observation in 1992 (T0, N = 3,805), the cooperation rate was 62%. Follow-ups were carried out in 1992-1993 (T1, N = 3,107), 1995-1996 (T2, N = 2,545), 1998-1999 (T3, N = 2,076), 2001-2002 (T4, N = 1,691), 2005-2006 (T5, N = 1,257),

and 2008-2009 (T6, N = 985). In 2002, a new sample was taken in the context of LASA (born in 1938-1947, N = 1,002); we assigned T4 to this observation. The new cohort followed the same sampling frame as the earlier cohort with a cooperation rate of 62%. Follow-ups were carried out in 2005-2006 (N = 908) and 2008-2009 (N = 833); these parallel T5 and T6. In each wave, the interviewers received a four-day training course and were supervised intensively by the LASA field work manager. The interviewers tape-recorded the interviews to monitor and enhance the quality of the data obtained. The interviews took between an hour and a half and two hours.

In the first step, we selected 625 respondents who moved to independent housing between the observations T1 and T6. This number was achieved by counting the number of respondents who moved between T1 and T2 (n = 185), T2 and T3 (n = 125), T3 and T4 (n = 73), T4 and T5 (n = 145), and between T5 and T6 (n = 97). For respondents who moved several times, we selected the first move. Furthermore, we selected 1,936 non-movers. For these respondents we randomly selected a set of two consecutive observations. The average age of the 2,561 respondents was 71.2 (range 57-93; SD = 8.3) at the follow-up observation. Most of them (65%) were married, 24% were widowed, 7% were divorced and 5% unmarried; 70% had a partner. The procedure yielded subsamples of movers and non-movers that differed in the following characteristics: gender composition ($\chi^2_{(1)}$= 8.0, p < .01; 55% of the movers were female, 45% of the non-movers were male), average age (M = 72.0 for movers and M = 71.0 for non-movers, $t_{(2559)}$ = 2.6, p < .01), marital and partner status ($\chi^2_{(3)}$= 13.9, p < .001 and $\chi^2_{(1)}$= 12.6, p < .001) respectively. More of the movers were divorced and widowed, more of the non-movers were married.

We excluded the respondents who died before the first follow-up (n = 700), were unable to take part in the study due to severe physical or mental health problems (n = 123), refused to do another interview (n = 462), or moved to another country or to an unknown address (n = 72). Due to the short follow-up time, we excluded respondents who moved between T0 and T1 (n = 98), lived in a care facility at baseline (n = 55) or moved to a care facility after baseline (n = 365). Our focus was not on institutionalization. Longitudinal data on the personal network were missing for 121 respondents who moved after baseline and 250 respondents who did not move. Reasons for missing data were premature termination of an interview, the use of an abridged version of the questionnaire or a telephone interview at a specific observation, or a proxy for respondents too physically or cognitively frail to be interviewed with the full questionnaire.

Measurements

Personal network

To obtain adequate information on the neighbor relationships of the older adults, they were first asked to provide detailed information on their relationships and identify their network members by name. The main objective was to identify a network of the older adults' socially active relationships in the core as well as the outer layers of the larger network (Van Tilburg, 1998). Respondents named network members in seven domains: household members (including the spouse or partner if there was one), children and their spouses, other relatives, neighbors, co-workers, fellow club members (athletic, church or political clubs), and others (friends and acquaintances). With respect to the domains, respondents could "name the people (e.g. in your neighborhood) you have frequent contact with and who are important to you." People could only be named once, so a person first named as a relative could not reappear as a neighbor. Using this procedure to elicit descriptions of networks, our focus was on personal relationships in general, including potential providers of social support. Only people above the age of 18 could be named. Interviewers gathered information on all the network members with regard to the type of relationship they had with the respondent. We defined neighbors as people named as neighbors or as people known from the neighborhood. New neighbors are identified after but not before moving. To detect lost and new relationships, we compared the names of all the network members in the various observations and linked them whenever possible.

Respondents had an average of 15.6 members in their network (SD = 9.1; range 1-67); they originate from the seven domains noted above and include kin and non-kin. The average number of neighbors was 1.8 (SD = 2.1; range 0-16) at the first set of two consecutive observations (T1 and T2, T2 and T3, etcetera) and 2.0 (SD = 2.2; range 0-20) at the second set of observations. Between the two selected consecutive observations, older adults maintained about half their neighbor relationships (M = 0.9) and had lost half of them (M = 0.9); they had started an average of 1.0 new neighbor relationships at the second observation.

Moves

On the basis of the respondent's address, at each observation we assessed whether a respondent had moved in the previous three years. The distance of the move was ascertained using Google Maps on the basis of the addresses before and after the move, and measured in kilometers and travel time by car.

Personal conditions

Hearing and physical activities

Respondents were asked if they could hear well. Values were 1 (*poor*) to 4 (*good*). A majority (67%) had good hearing. Respondents were also asked if they walked, biked or gardened regularly, all activities typically conducted close to the home, and a majority (94%) confirmed that they did.

Children

For those with children (90%), the amount of time it took to travel to each child with the transportation the respondent usually used was the assessed travel time between parents and children. The type of transportation depended on the respondents' preference. Travel time to the nearest child ranged from no travel time to twenty four hours or more and was an average of 22 minutes; after the move, 52% had children living within a travel distance of 10 minutes or less, which is a distance of about 10 kilometers.

Contextual conditions

Participation in organizations

The respondents could be involved in athletic, cultural, or senior citizens' clubs or voluntary organizations such as a union or church. Apart from asking if they were members of clubs, we asked if they did volunteer work at one or more of the clubs. Of all the respondents, 34% did volunteer work. We also asked whether respondents were church members and, if so, how often they attended church (this ranged from once a year to once a week or more often). More than half the respondents (59%) were church members. Almost half the church members attended church once a week or more.

Adapted housing

The interviewer could classify the type of housing: 88% of the respondents lived in *regular housing* (e.g. attached row, detached, apartment building) and 12% in *housing adapted for older adults* (e.g. near an institution with special services available).

Feeling safe

Respondents were asked if they felt safe in the evening in their neighborhood, and 85% confirmed that they did.

Urbanization and economic level

The level of urbanization in the neighborhood was divided into five classes, ranging

from not urban (less than 500 addresses in each square kilometer) to highly urbanized (more than 2,500 addresses); 22% lived in a highly urbanized area. The economic level was measured by the mean value of the homes in a neighborhood, ranging (after correction for inflation) from 76,000 to 647,000 Euros, with an average of 222,000 Euros. The data on the level of urbanization and neighborhood economic level originate from a database provided by Statistics Netherlands (Den Dulk, Van de Stadt, & Vliegen, 1992).

Procedure

We conducted OLS linear regression analyses on the number of new relationships with neighbors and stratified the analysis by the distance of the move: non-movers, movers within a distance of 10 kilometers, and movers over a distance of 10 kilometers or more. The 10-kilometer boundary used to distinguish short and long-distance movers was arbitrary, but identified the movers who mainly had to turn to another area for shops and services, since 10 kilometers is a significant distance in the Netherlands. Furthermore, if people move a short distance, they can stay in touch and continue their relationships with former neighbors as neighbor relationships. If they move a longer distance, relationships with former neighbors might be continued in the form of acquaintanceships or friendships. We controlled for the number of neighbors lost, gender, age, and partner status. As the distribution was skewed, we focused on the natural log of the numbers of neighbors gained and lost. The difference in the strength of the regression effects across the three groups of non-movers, short, and long-distance movers was tested by computing z-values.

Results

The 625 movers moved an average distance of 18 kilometers, which is equivalent to 17 minutes by car. Most of the older movers (n = 464) made a short distance move, some moved to the house next door; 161 moved 10 kilometers or more, with a maximum of 318 kilometers. Of the movers, 424 moved to regular housing, for example attached row or detached housing, and 201 to housing adapted for older people, for example apartment buildings with services. Most of the movers to adapted housing came from regular housing. Of the non-movers, 94% lived in regular housing (Table 1).

On the average, long-distance movers started more new neighbor relationships (M = 1.5) than non-movers and short-distance movers (M = 1.0 and 1.0 respectively); this is equivalent to an average of 0.64 for the natural log of the number of new neighbor relationships reported (Table 1). Short and long-distance movers both lost more neighbor relationships on the average than non-movers (M = 1.1, 1.1 and 0.8

respectively). So non-movers increased their number of neighbor network relationships significantly ($t_{(1935)}$ = -2.9, p < .01), the number did not change for short and long-distance movers ($t_{(463)}$ = -1.6, p > .05, and $t_{(1936)}$ = -1.4, p > .05 respectively).

Table 1. Descriptives of the sample according to moving distance

	Did not move (n = 1,936)		Moved within 10 kilometers (n = 464)		Moved farther away (n = 161)			
	M	SD	M	SD	M	SD		
New neighbors (LN; 0-2.5)	0.47	0.60	0.49	0.62	0.64	0.70	F =	6.4**
Neighbors lost (LN; 0-3.0)	0.41	0.57	0.54	0.60	0.55	0.59	F =	12.6***
Female (vs. male)	49%		56%		52%		Chi^2=	8.6*
Age (57-93)	70.95	8.40	72.57	8.17	70.49	7.78	F =	7.7***
With a partner (no-yes)	72%		63%		67%		Chi^2=	12.5**
Hearing (1-4)	3.57	0.75	3.53	0.73	3.68	0.62	F =	2.6
Walks, cycles, gardens (no-yes)	94%		94%		93%		Chi^2=	0.6
Child living nearby (no-yes)	52%		59%		37%		Chi^2=	24.2***
Volunteer work (no-yes)	36%		34%		24%		Chi^2=	11.1**
Attends church weekly (no-yes)	35%		45%		25%		Chi^2=	25.1***
Lives in adapted housing (vs. regular)	6%		37%		19%		Chi^2=	346.5***
Feels safe (no-yes)	86%		83%		84%		Chi^2=	2.8
Highly urbanized area (no-yes)	22%		21%		14%		Chi^2=	6.2*
Price of homes (0.8 - 6.5 x 100,000 euro)	2.24	0.83	2.13	0.78	2.24	0.79	F =	3.7*

Note: LN = natural log.
* p < .05. ** p < .01. *** p < .001.

As Table 1 shows, the three groups differ on many characteristics. Short-distance movers were relatively frequently female, old, moved from regular to adapted housing, frequently attended church services every week, and moved to areas with lower priced homes. Long-distance movers rarely had children living near their new home. They were not very involved in volunteer work and church services, and generally moved to less urbanized areas. Compared to non-movers, fewer short and long-distance movers had a partner. In the three years between the observations among the non-movers (n = 1,936), 1% started a new partner relationship and 5% lost their partner, predominantly due to their death. Among the movers (n = 625), 2% started a new partner relationship and 7% lost their partner, predominantly due to their death, which differs significantly from the non-movers ($\chi^2_{(2)}$= 9.3, p < .01). The other variables, physical activities, hearing and feeling safe were not associated with moving.

Table 2. OLS linear regression of number of new neighbors (LN)

	Did not move (*n* = 1,936)			Moved within 10 kilometers (*n* = 464)				Moved farther away (*n* = 161)			
	B	Beta	*t*	B	Beta	*t*	*z*	B	Beta	*t*	*z*
Constant	0.40			0.64				0.07			
Neighbors lost (LN; 0-3.0)	-0.05	-0.05	-2.3*	0.13	0.13	2.8**	-3.5***	0.16	0.14	1.8	-2.3*
Female (vs. male)	0.04	0.03	1.3	0.10	0.08	1.6	-0.9	0.05	0.03	0.4	-0.1
Age (57-93)	0.00	0.00	-0.1	0.00	-0.05	-1.0	0.9	0.00	0.03	0.3	-0.3
With a partner (no-yes)	0.03	0.03	1.0	0.02	0.01	0.2	0.2	0.08	0.05	0.6	-0.3
Hearing (1-4)	0.00	0.01	0.2	0.00	-0.01	-0.1	0.2	-0.02	-0.01	-0.2	0.2
Walks, cycles, gardens (no-yes)	0.02	0.01	0.4	-0.14	-0.05	-1.2	1.2	0.37	0.14	1.7	-1.5
Child living nearby (no-yes)	-0.10	-0.08	-3.6***	0.01	0.01	0.2	-1.7	0.00	0.00	0.0	-0.8
Volunteer work (no-yes)	0.03	0.02	0.9	0.22	0.17	3.3***	-2.7**	-0.06	-0.04	-0.5	0.6
Attends church weekly (no-yes)	0.03	0.03	1.1	0.09	0.07	1.5	-0.9	0.05	0.03	0.4	-0.1
Lives in adapted housing (vs. regular)	0.07	0.03	1.1	0.00	0.00	0.0	0.7	-0.03	-0.02	-0.2	0.6
Feels safe (no-yes)	0.06	0.03	1.4	0.08	0.05	1.0	-0.2	0.41	0.21	2.5*	-2.1*
Highly urbanized area (no-yes)	-0.11	-0.08	-3.2**	0.00	0.00	0.0	-1.4	-0.53	-0.27	-3.4***	2.6**
Price of homes (0.8 - 6.5 x 100,000 euro)	0.01	0.01	0.5	-0.02	-0.02	-0.4	0.6	-0.15	-0.17	-2.2*	2.2*
R^2	0.02			0.08				0.18			

Notes. Unstandardized (B) and standardized (Beta) effects; *t*-values are applied for testing significance of effects; *z*-values are applied for testing the difference with the effect among non-movers. LN = natural log.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2 shows the results of the regression of starting new neighbor relationships in the personal network. Since changes among the non-movers are probably related to numerous other events, we did not expect much change to be specifically associated with the personal and contextual conditions included in this study.

This is confirmed by the small R^2; the non-movers do not fit well into the model. Any change might reflect a natural circulation in the neighbor network. It means contact diminished with some neighbors and increased with others with approximately the same characteristics (Starker, Morgan, & March, 1993; Van Tilburg, 1998). The more neighbor relationships were lost, the fewer new neighbor relationships started between the two consecutive observations, suggesting a reduction in the neighbor network of some non-movers. On the average, non-movers with children living nearby had a lower score of 0.10 on the natural log of the number of new neighbor relationships. This can be translated into starting an estimated 1.52 relationships compared to 1.68 among those with no children or children living farther away, all else being equal. Older adults in less urbanized areas started 0.17 more relationships than older adults in other areas.

The fit of the model for short-distance movers is better (R^2 = .08). More lost neighbor relationships meant more new relationships. The effect is significantly stronger (z = -3.5) than for non-movers, indicating that movers replaced what they lost. The estimates reveal that controlled for all other characteristics, a mover who did not lose any neighbor relationships, probably because he did not have any, started 1.51 neighbor relationships, whereas a mover who lost two relationships started 1.75 neighbor relationships. Older adults who moved a short distance and did volunteer work started 0.37 relationships more than those who did not do volunteer work. This effect is significantly stronger than among non-movers (z = -2.7).

The model for long-distance movers shows an even better fit (R^2 = .18). Similar to the case of short-distance movers, the effect of the number of neighbors lost was positive, indicating that movers largely replaced former neighbor relationships. The estimated gain for a mover who had not lost any neighbor relationships is 1.74 neighbor relationships, while for a mover who had lost two neighbor relationships the estimated gain is 2.08. In particular, contextual conditions predicted the start of new neighbor relationships. Older people who felt safe in their new neighborhood started an average of 0.68 more relationships than those who felt unsafe. People who moved to less urbanized areas started 0.85 more relationships than those who moved to a city, and people in neighborhoods with lower priced homes (we took the first quartile to compute the estimate) started 0.23 more neighbor relationships than those in neighborhoods where prices were higher (the third quartile). The four effects were significantly stronger than among non-movers as indicated by the z-values.

Discussion

Starting new neighbor relationships after a move is thought to contribute to older adults' well-being and social support potential. We have studied several conditions that can influence the start of new neighbor relationships after a move. In our study, the average number of neighbors in older adults' personal networks is about two. This is similar to the results of some other studies (Völker & Flap, 2007), but much lower than the results of a study examining all proximate relationships (Hampton, 2007). Our respondents identified their neighbors exclusively by their role as neighbor, and kin and friends were excluded. These neighbor relationships had to fit the criteria of taking place on a regular basis and being important, suggesting that they are enduring and have a social support potential for the older adults.

The personal conditions we selected reflect the older adults' ability to leave the home and meet people, and the contextual conditions for undertaking these activities. Regardless of the distance of the move, movers lose more neighbor relationships than non-movers, and long-distance movers start the highest number of new relationships with neighbors. This compensation for lost relationships confirms our starting point in continuity theory (Atchley, 1989), which predicts that people restore lost relationships after a move. In explaining the differences in the number of new neighbor relationships after a move, we found four conditions to be important, which were all contextual: volunteer work, feeling safe, degree of urbanization and economic level. Their importance, however, varied across the short and long-distance movers.

First of all, volunteer work increased the likelihood of short-distance movers starting neighbor relationships. This confirms the importance of volunteer work for maintaining personal relationships later in life. Curtis, Grabb, and Baer (1992) studied membership in voluntary organizations among all age groups and observed that in particular, middle-aged and older people were members of voluntary organizations. Bukov et al. (2002) also observed that very old individuals are active, although their activities are less demanding than at a younger age. So doing volunteer work seems important for older adults in a broad age range. Short-distance movers may already have been a member of an organization, and continue to be after the move, which is nevertheless an important source of new contacts. This fits in with the findings of Wenger, Dykstra, Melkas, and Knipscheer (2007). They identified five types of networks, the most successful of which in terms of avoiding loneliness and isolation was the "locally integrated social support network". It is characterized by close relationships with local relatives, friends and neighbors, and in line with our findings, it is usually based on long-term residence and active involvement in church and voluntary organizations. Short-distance movers can be considered long-term residents since they stay in their familiar neighborhood after the move.

However, we did not observe that long-distance movers benefit from doing volunteer work, which suggests that short-distance movers may find new neighbor relationships in the same organizations they have been active in before the move. Our respondents moved up to a maximum of four years before the interview and most had not developed any neighbor relationships in this longer time period. Residents who interact socially with their neighbors are more likely to be aware of local voluntary organizations and join them (Chavis & Wandersman, 1990). It takes time to find new organizations and develop personal relationships with other members. Long-distance movers might also be too busy getting settled in their new home to start new relationships (Magdol & Bessel, 2003). We note that long-distance movers were most likely to move to rural areas with possibly fewer organizations close by, so that they may have to find other ways to meet their new neighbors.

As to the other contextual conditions, feeling safe, degree of urbanization and economic level all affected the new neighbor relationships long-distance movers started. This is what we expected. Moving to a rural area and feeling safe in the evening make it easier to start neighbor relationships, probably because there is a greater likelihood of meeting people outdoors. In an earlier study (Bloem et al., 2008b), we observed that the longer the distance of the move, the more former role relationships were lost, especially with neighbors. It follows that the need for contact with new neighbors is greater for people who move farther away, as they have more of a gap in their neighbor network. Older people in rural areas have more contact with neighbors than in urbanized areas (Van der Poel, 1993; Wenger, 1995; Thomése, 1998). The greater opportunities for meeting people in less urbanized areas apparently have a similar effect after moving, as older adults who move to a rural area meet new neighbors more easily. In addition, movers tend to move to areas with lower priced homes. Some older adults moved to similar homes in rural areas where housing prices are generally lower, neighborhoods are quieter and there is less fear of crime. Clark, Deurloo, and Dieleman (2006) found that especially older adults improve their neighborhood quality by moving from cities to rural areas, though the quality of the house, such as the size, stays the same.

Personal conditions had very little effect on starting new neighbor relationships after a move. As to poor hearing, the findings are not surprising since our respondents are relatively young (70 on the average) and healthy; more than half (68%) indicated that they could hear well. Most of the older adults (94%) engaged in physical activities outside the home. Apparently, we have not observed any differences in physical activity that may affected the ability to meet new neighbors.

As to the proximity of children, we expected movers with a child nearby to start neighbor relationships more easily since the children can help them settle in. However,

the results show that among movers, the proximity of children did not bear any relation to the number of new neighbor relationships. Also, non-movers with children nearby started fewer neighbor relationships. Having children nearby diminishes the need to socialize with one's neighbors, as was shown by Logan and Spitze (1994). They observed that people with more children nearby knew fewer of their neighbors and visited their neighbors less. Only families with small children develop neighbor relationships around the lives and needs of their children (Völker & Flap, 2007). Adult children living close to their parents may replace other neighbor relationships, in particular if we consider network relationships beyond the superficial level. This apparently outweighs any advantage to movers of having children living close to their new home and able to introduce them to their new neighbors.

Contrary to our expectations, we have not observed any effects of church membership either. At church one meets people with similar backgrounds and interests, and that is where there are opportunities to do volunteer work. The effect was absent in all the groups, including the non-movers. Relationships based on seeing each other frequently in church may bear more characteristics of a close-knit friendship network, rather than serve as a meeting ground for new relationships (Lim & Putnam, 2010). The effects of church-related volunteer work may play a role in our analysis of volunteering in general.

Lastly, we expected an effect of moving to adapted housing. There are more peers at adapted housing, and the physical proximity of the apartments and frequently shared facilities in the buildings can facilitate interaction with the neighbors. However, the lack of an effect is in line with literature on the effects of the physical characteristics of housing on social interaction. Gifford (2007) reviewed the consequences of living in high-rise and multifamily apartment buildings, and found that though high-rise residents encounter other residents, they tend to withdraw from further social interaction. This may also apply to our respondents, who apparently perceive "neighbors" in the building as acquaintances, who do not however meet with our definition as "important neighbors."

In reviewing our findings, we should note that we have not examined any selection effects. For example, older adults who moved farther away attended church less and did less volunteer work after the move, but in this study we did not examine the situation before the move. Long-distance movers might be less linked to their neighborhood to begin with, and thus more willing to move farther away. We have not asked the older adults what their reasons were for moving, since we confined ourselves to objective factors outside the individual. Where people live is linked in many ways to how they live and experience life, and further research could complement a longitudinal design with an open interview enhancing our understanding of the decision-making process behind

a move and how it informs the formation of relationships after the move (Sergeant, Ekerdt, & Chapin, 2008). We also did not disentangle bidirectional causal processes. For example, people might start new relationships in their neighborhood because they feel safe and go out more often, or they might feel safe because they have become acquainted with people in the neighborhood. As we noted above, this also applies to older movers who do volunteer work and start new relationships, as several studies have pointed out that formal volunteer work is dominated by people with greater resources (Minkler & Holstein, 2008; Broese van Groenou & Van Tilburg, 2010). Unlike many studies, we not only compared neighbor relationships before and after moves over various distances, we also compared changes in the neighbor relationships of movers to those of non-movers. This strengthens our ability to attribute the effects we observed to factors related to the move, and not to more general processes of network change.

On the basis of the social convoy model of Kahn and Antonucci (1980), we assumed that role relationships like those with neighbors are the most changeable ones, and the results showed that this was particularly the case for long-distance movers. We also assumed that starting new relationships after a move depends on enduring properties of the person and the context, in line with Sias and Bartoo (2007). The results of the current study showed that in particular contextual conditions play a role, and all the more so after long-distance moves. People who move shorter distances can benefit from opportunities they have created earlier by doing volunteer work either in their old or their new neighborhood. Long-distance movers do not just select new homes, they also buy into a new environment that can help them start new neighbor relationships. In either case, new neighbors are added to the network after the move. Lastly, not only did the relationships of movers change, so did the neighbor relationships of non-movers. As to the practical implications, these findings emphasize the resilience of older adults. Although many older adults prefer to age in place, moving might help them adapt to the next phase in their later life. Moving does not seem to be as disruptive to neighbor relationships as is often assumed and movers generally develop new relationships near their new home. Given the importance of contextual conditions, the older adults' own initiatives might be supported by providing opportunities to meet people, creating meeting places in public spaces, and stimulating recreational or educational activities.

Chapter 9

Summary and general conclusions

The central issue in the present study was whether we should be as pessimistic about the consequences of older people's moves as the adage 'never move an old tree' presupposes. We focused on the antecedents and consequences of later life migration. With the life course frameworks of Litwak and Longino (1987) and Mulder and Hooimeijer (1999) as starting point, the first question centered around the cumulative influence of life course events and several conditions on later moving decisions. We studied the influence of retirement, the loss of a partner, the empty nest and declining health on moves to residential care facilities, adapted housing and regular housing, and on the distance of the moves. We found partial support for the framework of Litwak and Longino that each life event triggered a specific type of move. In particular the transition to living alone and declining health were associated with moves to residential care facilities and adapted housing. Older people who had lost their partner often moved to adapted housing, and they were more likely to be institutionalized, if they had already health problems at the first observation. Also recently retired people and those whose last child left home improved their living environment and moved to regular housing in areas with a higher status. We did not observe a trajectory of moves associated with consecutive life events, as was suggested by the life course framework formulated by Litwak and Longino. By including the framework of Mulder and Hooimeijer, we were able to show that moving was more complex, as joint events and conditions played a role in the moving process.

The three subsequent research questions focused on the effects of moving on personal relationships and loneliness. The second research question focused on whether different types of moves would affect the sizes of core and role networks, and social and emotional loneliness. We compared the network sizes and the extent of loneliness before and after moves to regular housing and residential settings. We used the model of Lawton (1989), which predicts that well-being will be promoted by a good fit between the older adults functional capacities and their living environment. We observed that this applied especially to vulnerable older adults whose emotional loneliness decreased after a move to a residential care facility or nursing home. Emotional loneliness is generally associated with the absence of intimate relationships. Before the move there was no fit between the older adults' capacities and living environment: They lived alone, were in poor health and surrounded by professional care-givers. By moving, they adapted their living environment to give them more opportunities for intimate relationships, which resulted in a greater sense of well-being.

The convoy model of Kahn and Antonucci (1980) assumes that the role network is most susceptible to change because it consists of relationships dependent on the role context such as neighborhoods or work settings. In the third question, we therefore studied the effect of moving and moving distance on three types of role networks with

neighbors, fellow club members and co-workers respectively. As was expected, the results were most striking in the neighbor network: Long distance movers lost the most neighbor relationships and rebuilt their network with new neighbor relationships. Older adults also lost relationships with fellow club members, which was contrary to our expectations. We expected more continuity based on the assumption that people were motivated to continue being members of a familiar club or organization. No changes were found in the co-worker network, which was in accordance with our expectations. We also observed large turnovers in the networks of people who did not move, which in our view indicated a normal circulation. Over the life course people come and go, especially in role networks. The convoy model helped specify the effects of moving on particular role relationships, which was rarely done in longitudinal studies.

As neighbor relationships changed the most and were easily replaced, the fourth question focused on which conditions contributed to the development of new neighbor relationships after a move. We differentiated between long and short distance moves. The study was exploratory because not many theories focus on initiating role networks and relationships, in particular by older adults. We chose eight conditions connected to personal and contextual circumstances. They were based on the assumption that older adults need to have opportunities to meet (Völker & Flap, 2007), and perceive similarity or share activities (Sias & Bartoo, 2007). Contextual conditions such as volunteering and neighborhood characteristics were more beneficial to older adults than personal factors, such as health or children nearby, in developing new neighbor relationships, especially after a long distance move.

With regard to the overall conclusion, we found ample support for our expectation that residential relocation, even for older people, is not that much of a drama. As we noted in the introduction, many studies assume that for older adults in particular, a move can be mentally and physically disastrous. The dominant conviction, not in the least among older adults themselves, is that aging in place is best for everyone. Governments in Western Europe and in recent years in the United States as well share this conviction and formulate policies to help older adults to age in place. To put relocation and aging in place in perspective, first a distinction is drawn between voluntary and involuntary moves, with the latter having more emotional consequences than the former (Nygren & Iwarsson, 2009). Sergeant, Ekerdt, and Chapin (2010) compared older adults' expectations about moving to their actual moves in the community or to a care setting. They found that their expectations were predictors for moves in the community, but not for moves to a care setting, which were often triggered by life events related to health and partner status and therefore less predictable. Second, even when aging in place is discussed and alternatives are presented (Golant, 2008), the well-being of older people should be taken into consideration. The results of this study consistently

show that older adults restore their personal networks, and that their well-being is not negatively affected after moving.

In our empirical chapters, *three theoretical lines* become visible; the first pertains to the *relocation process* and specifically the variability within this process, the second to the *convoy model* dealing with life course changes at the network level, and the third to *social capital* with the focus on individual choices as regards the personal network. The second and third propose mechanisms to explain network change. We consider these lines against the background of aging in place (Wahl, Iwarsson, & Oswald, 2012).

As to *the relocation process*, we showed in Chapter 2 that older movers do not go through age-graded transitions, where moves might follow specific life course events as suggested by Litwak and Longino (1987). Even though not many older people move in the Netherlands, as in many other Western countries, there are many pathways in the process of moving. We added conditions in line with the framework formulated by Mulder and Hooimeijer (1999) to justify the complexity of the process. Oswald and Rowles (2006) suggested more detailed and discriminating analyses of specific predictors such as health, and outcomes of relocation. Furthermore they suggested using longitudinal designs to follow residential trajectories over time, to study individuals before and after the move, and to compare movers and non-movers. Krout and Wethington (2003) described how the diversity of housing arrangements for older people increased in recent decades, affecting residential needs and decisions as well as subsequent outcomes for people who moved as well as those who remained in place. Our longitudinal design enabled us to follow the residential trajectories of older people and compare different samples. Older adults moved in response to separate life course events, and although we found variability in the process, it can be reduced to characteristics of voluntary and involuntary moves. Voluntary moves are often characterized by changes in personal and environmental circumstances, while involuntary moves often occur due to negative changes in personal circumstances, often in terms of declining health (Nygren & Iwarsson, 2009).

Over time, the life courses of older people changed. In the postwar years it was common to move to homes for the aged soon after retirement, at a relatively young age. There was a housing shortage for younger families, and admission to residential care was available for people in relatively good health. By the 1980s, pre-retirement schedules lowered the age for leaving the labor market to the mid or late fifties. The government started lowering institutionalization rates by having admission depend on a greater need for care. These changes accompanied increased individualization, making institutionalization at a younger age a less common choice (Gilleard & Higgs, 2005). Life course changes such as retirement and the empty nest and their consequences for relocation reflect the institutional and cultural formations of later life.

Variability in the process is related to the destandardization of the life course and shifts in typical roles, which reflects broader societal changes (Thomése et al., 2005). These changes were increasingly accompanied by diversity in housing arrangements.

With the choices available, the question arises as to why older adults persistently prefer to *age in place* with the risk of missing out on congruent residential environments. As Golant (2011) put it, older adults eventually find themselves in residential arrangements with split personalities. The condition of the house and of the older adult no longer fit (Lawton, 1989). Aging in place means remaining in the community with some level of independence rather than in residential care. It is seen as enabling older people to maintain independence, autonomy and a connection to their social support resources including their friends and relatives (Wiles, Leibing, Guberman, Reeve, & Allen, 2012). In addition, it avoids the costs of institutional care and is favored by policy makers, health providers and older adults themselves, as is noted elsewhere.

The discussion of aging in place is most relevant for older adults with declining health because they have the least choice as regards remaining at home. Arguments in this discussion center around feelings of familiarity; older adults have often lived a long time at their current addresses. The tone of these arguments is predominantly a positive one. It is however overlooked that the social environment is not always positive. In the first place, people often have problematic relationships with their neighbors, mainly due to noise and arguments (Ross and Mirowsky, 1999; Perkins & Taylor, 1996). Most Dutch neighborhoods differ greatly from the American disadvantaged areas in these studies, but similar problems seem to play a role. Hoexum (2011, January 8) describes neighbors as a chronic disease there is no escape from since there is no medicine. Second, the social environment is subject to change. When people age, their neighborhood changes as well (Deeg & Thomése, 2005). Children, friends, acquaintances and neighbors also grow older, become ill, or move to other parts of the country. The former residents might be replaced by others, leaving the elderly ultimately in a vacuum because social relationships in the immediate environment deteriorated. This includes the risk of social isolation and along with declining health, malnutrition was recently observed (Schilp et al., 2012). Third, in the event of health problems, if care is provided by a partner or children, this entails specific difficulties. An older partner can have health problems too, and family members usually lack the experience or skills to provide professional support. It is usually unregulated and unsupervised, and although given with the best intentions, inadequate and poor-quality care can contribute to home accidents, emergency room visits or hospitalization (Golant, 2008).

This brings us to the two theoretical lines in our empirical chapters that address network change. *The convoy model* (Kahn & Antonucci, 1980) focuses on the antecedents and consequences of life course changes at the network level. In the

convoy structure, the life course is a basic determinant of changes, encompassing changes in personal properties (individual needs and assets) as well as situational characteristics (role changes) (Thomése et al., 2005). Based on the convoy model, in Chapter 4 we found that the role network did not change that much after regular moves. As predicted by the convoy model, role relationships were interchangeable, especially with neighbors. There was some loss in the relationship categories of fellow club members and colleagues, but it was not dramatic. The role networks remain quite stable in the event of relocation. We also conclude that despite suggestions that the geographical basis of relationships is losing importance (Van Tilburg & Thomése, 2010), a shared location is still important for the neighbor and club member relationships of older movers. Launching a new network depended in part on a shared location, as was clear in Chapter 5, where factors connected to the neighborhood play an important role in the event of regular moves. Logan and Spitze (1994) stressed that older residents have greater social cohesion within a neighborhood than younger ones. Early old age in particular is a period when neighborhood involvement increases. Older people tend to make friends in the neighborhood. Moreover, older adults facilitate the social control in the neighborhood because they are at home during the day and more likely to visit and maintain social ties with their neighbors (Ross & Mirowsky, 1999). Although we did not use the convoy model regarding movers to care facilities, the model as well as the findings can be applied to them as well, since we did not find any large changes in their personal networks either. The shared location arguments apply to these movers as well. Care setting residents have opportunities to meet other people if they have the same daily routines regarding meals and other activities or if they share rooms. We can thus conclude that despite a considerable turnover in the constituting relationships, the personal networks of movers generally remain stable.

The composition of the personal networks changed, but this only had a limited impact on the network size. Lost relationships were largely replaced by new ones. The decision to end relationships and start new ones, especially role relationships, might be based on cost and benefit considerations and on the availability of alternative relationships. This third theoretical line follows from theories of *social capital* at the individual level (Thomése, et al., 2005); people invest in others to gain future access to resources. The farther one moves, the higher the costs of continuing role relationships with people from the old neighborhood. The most important cost relates to increased travel time, leading to less spontaneous contact opportunities. The benefits of starting relationships in the new neighborhood relate to the provision of support and access to information. This cost and benefit mechanism also applies to people who move to residential care facilities or nursing homes. In particular if social relationships in the old neighborhood deteriorated due to the older people's increasing need for help,

institutionalization provide an opportunity to start new, more balanced relationships with peers. As is clear in Chapter 3, the first post-move contacts are instrumental, aimed at gaining information on daily routines, and in the long run more emotionally directed toward interaction with peers. This theoretical line complements the convoy model. Both address changes in older adults' needs and circumstances. The convoy model, however, deals with changes at the network level. Although there are considerable changes in role relationships, the personal network as a whole remains relatively stable. The social capital theories focus on changes at an individual level. This theoretical line predicts which specific relationships older adults will devote their efforts to. The two theoretical lines are thus complementary (Thomése et al., 2005).

This study attempted to address the following research question: *What are the antecedents of the residential relocation of older Dutch adults and what are the social consequences?* We observed that many older adults move after individual life course events and often adapt successfully. We conclude that certain older trees do blossom after a move. Relocation is not socially or emotionally disruptive and there is no longer much reason to consider older adults victims of a move, as the adage 'never move an old tree' suggests. It could be noted that earlier in life, people focus on challenges and changes (jobs, houses, holidays), whereas later in life the focus is more on hanging onto what is familiar (Wahl et al., 2012). Paradoxically, aging in place is often linked to enhanced feelings of control, even if it is a move that could enhance feelings of control and a more satisfying future (Golant, 2011). In modern society, older adults can take responsibility for their own lives by shaping their network after a move and arranging it to suit their needs.

It is no simple matter however to make recommendations on the basis of these outcomes. Generally speaking, a cultural shift in how late life relocation is viewed would be desirable. The government needs to genuinely inform older people and their social environment about the pros and cons of aging in place. Not only do the oldest people need to be informed, so do younger ones, who have more choice as regards coming health problems. The government should also examine whether aging in place is more cost-effective than living at residential care facilities or nursing homes. All the costs of aging in place, subsidized support and home adaptations, the labor costs of family caregivers that might include career disruptions and lost wages, visits from and to medical professionals and overdue home maintenance need to be measured. Only then can older people make a well-founded decision about whether to move or not, and understand the implications of the step. Successful aging means older adults can actively manage their own experiences and need not fear age-related changes.

Samenvatting

Verhuizing en persoonlijke netwerken van ouderen

Een bekend Nederlands gezegde luidt: Oude bomen moet je niet verplanten. Het zijn niet in de laatste plaats de ouderen zelf die een verhuizing als een stressvolle belevenis beschouwen. Het is moeilijk passende huisvesting te vinden en ook kan een verhuizing betekenen dat de laatste fase in het leven is aangebroken, iets waar ouderen liever niet mee geconfronteerd worden. Verhuizen betekent het opgeven van een vertrouwd huis en als de verhuizing over een langere afstand is, afscheid nemen van mensen waar dagelijks contact mee bestond. Verhuizen naar een verzorgingshuis betekent bovendien verlies van autonomie, en minder comfort en zorg dan men gewend was. Het is daarom niet verbazingwekkend dat van de 55-plussers slechts 4% verhuist, terwijl dit in de gehele populatie ongeveer 10% is (CBS, 2012). De neiging te verhuizen neemt met de jaren af. Na het vinden van een vaste baan vinden en het stichten van een gezin, raken mensen steeds meer gehecht aan huis en haard, en als ze ouder worden, willen ze zo lang mogelijk in hetzelfde huis blijven wonen. Velen blijven er zelfs wonen lang voorbij het punt dat huis en omgeving niet meer passen bij hun behoeften en omstandigheden, met sociale isolatie en eenzaamheid als mogelijke gevolgen.

De overheid steunt de wens van ouderen om in hun vertrouwde huis te blijven door voorzieningen te subsidiëren die zelfstandig wonen bevorderen (Ministerie van VROM, 2005). Voorbeelden zijn boodschappendiensten, Tafeltje-dek-je, vervoer, schoonmaken en woningaanpassingen. Daarnaast zijn er verzorgings- en verpleeghuizen voor ouderen met grote gezondheidsproblemen en verder voorzieningen als dagopnames, kortdurend verblijf in een verzorgingshuis, of appartementen met services. Dit beleid is kosteneffectief omdat zelfstandig wonen als minder duur wordt beschouwd dan wonen in zorginstellingen. Ouderen die verhuizen naar een zorginstelling zijn vaak op hoge leeftijd, hebben een grote zorgbehoefte en laten een netwerk achter dat bestaat uit informele en professionele zorgenden.

De meeste ouderen zijn in hoge mate gezond en kunnen lang zelfstandig blijven wonen zonder veel zorg of hulp. Vaak neemt pas op hoge leeftijd de gezondheid af. Voor het welbevinden van ouderen is het belangrijk te weten of ze verhuizen, en als ze verhuizen, naar welk type buurt en het soort woning. Daarom luidt de algemene onderzoeksvraag van dit proefschrift: *Wat zijn de determinanten van een verhuizing door Nederlandse ouderen en welke sociale gevolgen heeft dit?* Er is weinig bekend over de determinanten van een verhuizing, en om dat in kaart te brengen onderzoeken wij levensgebeurtenissen in relatie tot verschillende typen verhuizingen. Er is nog veel minder bekend over de sociale gevolgen van een verhuizing en daarom onderzoeken wij vervolgens de grootte en samenstelling van het persoonlijk netwerk van ouderen en ook hun gevoelens van eenzaamheid.

Determinanten van verhuizingen

Om de determinanten van verhuizingen te onderzoeken, starten we vanuit het levensloopperspectief van Elder (1994). De levensloop is gedefinieerd als 'een opeenvolging van sociaal omschreven gebeurtenissen en rollen die een persoon gedurende zijn leven doorloopt' (Giele & Elder, 1998, p. 22). Gebeurtenissen en verandering van rollen hebben geen vaste volgorde - niet iedereen ervaart dezelfde gebeurtenissen of heeft dezelfde rollen. Rossi (1955) gebruikte dit perspectief om een levensloopmodel voor verhuizingen te ontwikkelen, waarbij het uitgangspunt was dat mensen vaak verhuizen in relatie tot een levensloopgebeurtenis (verandering van baan, huwelijk of kinderen die het huis verlaten). Litwak en Longino (1987) werkten dit uit naar een levensloopmodel voor ouderen waarin het uitgangspunt was dat het type verhuizing samenhing met de plaats in de levensloop. Zo verhuizen jonge ouderen na een pensionering naar een prettigere omgeving, als ze ouder worden en lichte gezondheidsproblemen krijgen keren ze terug naar de oude woonomgeving, meestal in de buurt van de kinderen, en de oudsten met gezondheidsproblemen verhuizen naar een verzorgings- of verpleegtehuis. Onderdelen van het model zijn voornamelijk in de Verenigde Staten onderzocht, en dan vooral de verhuizing na de pensionering, en terugkeermigratie in samenhang met lichte gezondheidsproblemen. Met behulp van een longitudinaal design, hetgeen zelden is toegepast (Walters, 2002; Sergeant, 2008), onderzoeken we of opeenvolgende levensgebeurtenissen en verschillende condities invloed uitoefenen op de verhuizingen door ouderen. Daarbij gaan we uit van twee dynamische levensloopperspectieven die de interactie tussen levensgebeurtenissen en condities in verschillende levensdomeinen benadrukken, namelijk die van Elder (1985) en van Mulder en Hooimeijer (1999). De eerste onderzoeksvragen luiden als volgt: *Worden verhuizingen in gang gezet door gebeurtenissen op latere leeftijd in het domein van de familie, van het werk, van de woning en van de gezondheid? Is sprake van opeenvolgende gebeurtenissen en condities in één of meer levensdomeinen die een specifieke verhuizing in gang zetten?*

Sociale gevolgen van een verhuizing

In veel onderzoeken wordt ervan uitgegaan dat verhuizen negatieven gevolgen heeft; het kan uitmonden in een depressie (Bradley & Van Willigen, 2010), een hogere kans om te overlijden (Boyle, 2004) of in een verminderde werking van het immuunsysteem (Lutgendorf et al., 2001). Ons uitgangspunt is positief: we veronderstellen dat ouderen door een verhuizing hun woonomgeving verbeteren en zich goed kunnen aanpassen aan de veranderingen daarna. In het model van Lawton (1989) komen deze veronderstellingen terug: de gezondheid van ouderen dient in overeenstemming te zijn

met de woonomgeving. Wanneer dit niet het geval is, verhuizen zij naar een omgeving die beter past bij hun gesteldheid, zoals een zorginstelling. Wanneer de verhuizing zorgt voor een betere balans tussen de fysieke mogelijkheden van de oudere en de eisen aan de omgeving, is sprake van een geslaagd aanpassingsproces.

Een goede balans maakt dat ouderen beter in staat zijn hun persoonlijk netwerk te onderhouden. Dit netwerk bestaat uit personen waarmee regelmatig contact wordt onderhouden en waarmee nauwe banden bestaan. Een persoonlijk netwerk functioneert als een belangrijke structuur tussen het individu en zijn omgeving; het zorgt voor onderlinge samenhang, het gevoel erbij te horen, en het beschermt tegen eenzaamheid (De Jong Gierveld, Van Tilburg, & Dykstra, 2006). In de volgende onderzoeksvraag stellen we de vraag centraal of verhuizen een gunstige invloed heeft op het gevoel van welbevinden: *Hebben ouderen met gezondheidsproblemen die verhuizen naar aangepaste huisvesting een groter persoonlijk netwerk dan ouderen die niet verhuizen? Zijn deze verhuizers minder eenzaam?*

Het tweede theoretisch model dat gebruikt wordt om de sociale gevolgen van een verhuizing te onderzoeken, is het konvooimodel van Kahn en Antonucci (1980). Dit levensloopmodel verklaart veranderingen in persoonlijke netwerken. Deze veranderingen zijn niet noodzakelijkerwijs het gevolg van een verhuizing. Het evalueert de effecten van een verandering, zoals een verhuizing, in termen van overeenstemming tussen de behoeften van een individu en de beschikbare relaties in het persoonlijk netwerk. Het model verbeeldt het individu als omringd door een konvooi van personen waarmee het al zijn hele leven een relatie heeft. Gedurende de levensloop verdwijnen relaties als gevolg van levensloopgebeurtenissen, andere relaties komen er nieuw bij, en sommige relaties maken hun hele leven deel uit van het konvooi. In het model worden twee deelnetwerken onderscheiden, het kern- en het rolnetwerk. Het kernnetwerk bestaat uit relaties waar nauwe banden mee bestaan, zoals familie en vrienden, terwijl met de relaties in het rolnetwerk een meer afstandelijke band bestaat, zoals met buren en leden van een organisatie. Ofschoon alle relaties waardevol zijn, bestaan er verschillen in de sterkte van de band en de frequentie van contact. Het rolnetwerk is het meest veranderlijk. De gevoeligheid voor verandering hangt samen met drie karakteristieken van de rolrelaties, namelijk of sprake is van buurtrelaties, of ze in meer of mindere mate vrijwillig zijn gestart en of ze in meer of mindere mate instrumenteel van aard zijn. De derde onderzoeksvraag luidt: *Welk type rolrelatie eindigt of wordt voorgezet na een verhuizing en worden nieuwe rolrelaties aangegaan?*

Tot slot kijken we naar buurrelaties na de verhuizing, omdat deze het meest veranderlijk zijn en ze belangrijke functies voor ouderen vervullen. Na de verhuizing kunnen buren informatie over de nieuwe buurt verschaffen, assistentie verlenen bij

kleine aangelegenheden, en later, in geval van gezondheidsproblemen, de functie van contact en ondersteuning vervullen (Litwak & Szelenyi, 1969; Unger & Wandersman, 1985). Mensen brengen veel tijd door in de buurt waar ze wonen en een buurt biedt goede mogelijkheden tot het aangaan van nieuwe relaties (Kalmijn & Flap, 2001). Omdat individuen verschillen op allerlei aspecten, kan het leggen van nieuwe contacten niet als een rechtlijnig proces beschouwd worden. We verwachten, in deze verkennende studie, dat persoonlijke en contextuele factoren een rol spelen. De laatste onderzoeksvraag is: *Welke factoren spelen een rol bij het aangaan van nieuwe buurrelaties?*

Onderzoeksopzet en data

Om de onderzoeksvragen te bestuderen is gebruik gemaakt van data uit de *Longitudinal Aging Study Amsterdam* (LASA; Huisman et al., 2011). LASA is een langlopend, multidisciplinair onderzoek dat zich richt op een breed scala van onderwerpen gerelateerd aan de fysieke en cognitieve gezondheid en het sociaal en psychologische functioneren van de ouder wordende bevolking (Deeg et al., 1993). Dit onderzoek komt voort uit een eerder onderzoeksprogramma, *Living Arrangements and Social Networks (LSN) of Older Adults* (Knipscheer et al., 1995). Het onderzoeksprogramma beschrijft de Nederlandse populatie in de leeftijd van 55 jaar en ouder. Het onderzoek startte in 1992, waarbij een representatieve, gestratificeerde steekproef werd getrokken uit een groep mannen en vrouwen, geboren tussen 1908 en 1937, en afkomstig uit elf gemeenten in Nederland. Hiermee zijn alle vormen van religie en de mate van urbanisatie (dorp en stad) vertegenwoordigd in het onderzoek. In T0, de eerste waarneming in 1992 (N = 3,805), was de respons 62%. Follow-ups werden uitgevoerd in 1992-1993 (T1, N = 3,107), 1995-1996 (T2, N = 2,545), 1998-1999 (T3, N = 2,076), 2001-2002 (T4, N = 1,691), 2005-2006 (T5, N = 1,047), 2008-2009 (T6, N = 985), en – nog in uitvoering – 2011-2012 (T7). In 2002 werd een steekproef uit een nieuw cohort genomen (geboortejaren 1938-1947, ook genoemd T4, N = 1,002) waarbij het steekproefkader hetzelfde was als voor het vorige cohort. Ook in deze steekproef was de respons 62%. Follow-ups werden uitgevoerd in 2005-2006 (T5, N = 861), 2008-2009 (T6, N = 766), en – nog in uitvoering – 2011-2012 (T7).

Voor de beantwoording van de onderzoeksvragen zijn respondenten uit verschillende waarnemingen geselecteerd. Voor de eerste onderzoeksvraag zijn respondenten geselecteerd die op T1 zelfstandig woonden, en waarvan minstens één volgende waarneming aanwezig was. Voor een goede vergelijking werd iedere verhuizer gekoppeld aan twee niet-verhuizers; de groepen waren vergelijkbaar met betrekking tot geslacht, leeftijd en het jaar van de waarneming. Voor de tweede onderzoeksvraag ging het om respondenten met een slechte gezondheid, waarbij

werd gekeken of ze in het vervolg van het onderzoek verhuisden. Voor de derde onderzoeksvraag waren dat respondenten die tussen T2 en T4 naar een zelfstandige woning verhuisden. Ook voor deze vraag werden verhuizers en niet-verhuizers gekoppeld. De laatste onderzoeksvraag had een andere opzet: respondenten zijn geselecteerd die verhuisden naar zelfstandige huisvesting tussen T1 en T6 met het doel de situatie voor en na de verhuizing te onderzoeken. Voor een verdere vergelijking werden twee opeenvolgende waarnemingen van niet-verhuizers geselecteerd. Doordat een gestratificeerde steekproef is getrokken, is het aantal mannen en vrouwen in de verschillende studies zo goed als gelijk. De leeftijd van de respondenten is in alle studies tussen 55 en 93 jaar.

Samenvatting van de resultaten en algemene conclusies

De *eerste onderzoeksvraag* had betrekking op levensgebeurtenissen en condities, en de relatie met het type verhuizing. De resultaten laten zien dat iedere levensgebeurtenis samenhangt met een specifiek soort verhuizing. Alleen wonen in combinatie met een sterke achteruitgang in de gezondheid leidde in veel gevallen tot een verhuizing naar een verzorgings- of verpleeghuis. Het verlies van de partner werd vaak gevolgd door een verhuizing naar voor ouderen aangepaste huisvesting. Als de gezondheid bij de eerste waarneming slecht was, was er later een grote kans naar een zorginstelling te verhuizen. Een recente pensionering leidde tot een verbetering van de woonomgeving, doordat ouderen verhuisden naar een regulier huis in een buurt met een hogere status. We vonden geen aanwijzing voor een opeenvolging van gebeurtenissen in relatie tot de verschillende verhuizingen, zoals geformuleerd door Litwak en Longino (1987). Door gebruik te maken van het model van Mulder en Hooimeijer (1999), kon worden aangetoond dat verhuizen een enigszins complex proces is, omdat een aantal levensgebeurtenissen en condities samengingen.

De *tweede vraag* had betrekking op de gevolgen van de verhuizing voor de grootte van het persoonlijk netwerk en de gevoelens van eenzaamheid. Beide werden vergeleken voor en na een verhuizing naar reguliere en aangepaste huizen, en naar een verzorgings- of verpleeghuis. Uit de resultaten blijkt dat er niet veel veranderde in de persoonlijke netwerken. De emotionele eenzaamheid van de meest kwetsbare groep ouderen verbeterde echter na een verhuizing naar een verzorgingshuis of verpleeghuis. Emotionele eenzaamheid heeft betrekking op een gemis van vertrouwde relaties. Het model van Lawton (1989) is van toepassing op deze groep ouderen: zij wonen alleen, hebben een slechte gezondheid en zijn omringd door professionele zorgverleners. Dat wil zeggen dat de woonomgeving na de verhuizing beter is afgestemd op de fysieke gesteldheid van deze groep ouderen. Daardoor ontstaan mogelijkheden om nieuwe relaties aan te gaan, wat het welbevinden ten goede komt.

Deze groep was voor de verhuizing minder sociaal eenzaam dan de andere verhuizers en de niet-verhuizers. Dit komt waarschijnlijk doordat ze omringd waren door informele en formele zorgverleners.

De *derde onderzoeksvraag* had betrekking op de gevolgen van een verhuizing en van verschillende verhuisafstanden op drie typen rolnetwerken: met buren, met leden van een organisatie en met collega's. Het konvooimodel van Kahn en Antonucci (1980) gaat ervan uit dat het rolnetwerk het meest veranderlijk is, omdat relaties in dit netwerk gebonden zijn aan een rolomgeving, zoals de buurt of het werk. Zoals verwacht veranderden relaties met buren het meest. Vooral lange-afstandsverhuizers verloren veel buurrelaties, maar startten ook de meeste relaties met nieuwe buren. Ook gingen veel relaties met leden van organisaties verloren. De verwachting was dat ouderen gemotiveerd waren om lid te blijven van een organisatie na een verhuizing, maar dit bleek niet het geval te zijn. We vonden, conform de verwachting, weinig verandering in het netwerk dat bestond uit collega's. Ook in de netwerken van niet-verhuizers vonden veel veranderingen plaats. We beschouwen dit als een normale circulatie: gedurende de levensloop verschijnen en verdwijnen relaties met enige regelmaat, vooral in het rolnetwerk. Het konvooimodel heeft eraan bijgedragen dat de gevolgen van een verhuizing beter in beeld gebracht zijn dan in eerder onderzoek.

Omdat relaties met buren het meest veranderlijk bleken, stonden in de *vierde en laatste onderzoeksvraag* factoren centraal die bijdragen aan het aangaan van relaties met buren na een verhuizing. We maakten onderscheid in verhuizingen over lange en korte afstand. Het betrof hier een verkennend onderzoek, omdat niet veel theorieën zich richten op het aangaan van nieuwe rolrelaties, en zeker niet bij ouderen. We selecteerden acht factoren die gerelateerd zijn aan persoonlijke omstandigheden, zoals gezondheid en kinderen die in de buurt wonen, en aan de buurt, zoals vrijwilligerswerk, gevoelens van veiligheid en mate van urbanisatie. De aanname is dat mensen moeten beschikken over voldoende ontmoetingsmogelijkheden (Völker & Flap, 2007), waar ze gelijkgestemden kunnen tegenkomen of mogelijkheden hebben tot het delen van activiteiten (Sias & Bartoo, 2007). Na een verhuizing bleken factoren in de buurt een grotere rol te spelen dan persoonlijke factoren. Vrijwilligerswerk was belangrijk voor het ontwikkelen van buurrelaties, vooral na een verhuizing over korte afstand, en karakteristieken van de buurt, zoals veiligheid en een rurale omgeving, speelden een rol na een verhuizing over een lange afstand. Ook in de relaties die niet-verhuizers met buren hebben vonden veranderingen plaats. De resultaten laten daarom zien dat ouderen veerkracht hebben, ze passen zich na een verhuizing aan en gaan nieuwe contacten niet uit de weg.

Een *algemene conclusie* op basis van de resultaten van de vier onderzoeken is dat verhuizen geen drama is. Zoals hiervoor al is beschreven, gaan veel onderzoeken

wel van die veronderstelling uit. Het wordt ouderen op allerlei manieren mogelijk gemaakt om zo lang mogelijk in hun vertrouwde huis te blijven wonen. Wanneer we verhuizingen door ouderen en de situatie van het 'vertrouwde huis' in perspectief plaatsen, vallen twee zaken op. Allereerst kan onderscheid worden gemaakt tussen vrijwillige en niet-vrijwillige verhuizingen, waarbij de laatste meer emotionele gevolgen heeft dan de eerste (Nygren & Iwarsson, 2009). Dit komt overeen met verwachtingen die ouderen hebben over een verhuizing: de verwachting om naar een gewoon huis te verhuizen is een accurate voorspeller van de feitelijke verhuizing, maar dat geldt niet voor een verhuizing naar een verzorgingshuis of verpleeghuis (Sergeant, Ekerdt, & Chapin, 2010). Deze is minder voorspelbaar en minder vrijwillig omdat ze vaak voortkomt uit gezondheidsproblemen en het verlies van een partner. Ten tweede, als het 'vertrouwde huis' ter discussie wordt gesteld en alternatieven aan de orde komen (Golant, 2008), dient het welbevinden van ouderen een punt van overweging te zijn. Dit onderzoek heeft laten zien dat ouderen hun persoonlijk netwerk vernieuwen, en ook dat het welbevinden niet onder een verhuizing lijdt.

In de empirische hoofdstukken zijn drie theoretische lijnen te ontwaren: de eerste heeft betrekking op *het verhuisproces*, en vooral op de variatie in dat proces, de tweede op *het konvooimodel* en de levensloopveranderingen op het niveau van het netwerk, en de derde op het *sociale kapitaal* met de nadruk op individuele keuzes binnen het persoonlijk netwerk. De laatste twee behelzen mechanismen om netwerkveranderingen te verklaren. We bespreken deze drie lijnen tegen de achtergrond van het 'vertrouwde huis' (Wahl, Iwarsson, & Oswald, 2012).

Met betrekking tot *het verhuisproces* vonden we in hoofdstuk 2 geen aanwijzingen voor een stapeling van levensgebeurtenissen in relatie tot de verschillende verhuizingen, zoals geformuleerd door Litwak en Longino (1987). Door condities toe te voegen, deden we recht aan de complexiteit van het proces (Mulder & Hooimeijer, 1999). Oscar en Rowles (2006) suggereerden om in onderzoek naar verhuizingen meer detail in de voorspellende variabelen aan te brengen, zoals in de variabele gezondheid, en daarnaast gebruik te maken van een longitudinaal onderzoeksontwerp. Daarmee kunnen verhuistrajecten over de tijd gevolgd worden, kunnen individuen voor en na de verhuizing vergeleken worden, en ook verhuizers en niet-verhuizers. Krout en Wethington (2003) beschreven hoe de diversiteit in typen huisvesting voor ouderen de laatste tien jaar enorm is toegenomen. Dit heeft invloed op zowel de beslissingen van degenen die verhuizen als de behoeften van degenen die in hun vertrouwde huis blijven. Door gebruik te maken van een longitudinaal onderzoeksontwerp konden we verschillende verhuistrajecten volgen. De ouderen in dit onderzoek verhuisden in relatie tot op zichzelf staande levensgebeurtenissen en er was variatie in het proces, maar dit kon worden herleid tot vrijwillige en niet-vrijwillige verhuizingen. Vrijwillige

verhuizingen hangen samen met veranderingen op zowel het persoonlijke vlak als veranderingen in de omgeving, en niet-vrijwillige verhuizingen worden vaak in gang gezet door negatieve veranderingen in de persoonlijke omstandigheden, meestal de gezondheid (Nygren & Iwarsson, 2009).

In de loop van de jaren zijn de levenslopen van mensen veranderd. Na de Tweede Wereldoorlog was het gebruikelijk dat ouderen op relatief jonge leeftijd naar een verzorgingshuis verhuisden. Er was een tekort aan woningen voor jonge gezinnen, en daarom verhuisden jonge ouderen met een relatief goede gezondheid vaak naar een verzorgingshuis. In de jaren tachtig werd de leeftijd van ouderen die pensioneerden steeds lager. De overheid begon de hoeveelheid verhuizingen naar zorginstellingen terug te brengen, waardoor het alleen nog mogelijk werd om met gezondheidsproblemen te verhuizen. Deze veranderingen vonden plaats tegen de achtergrond van toenemende individualisering, waardoor verhuizing naar een zorginstelling op jonge leeftijd een steeds minder voor de hand liggende keuze werd (Gilleard & Higgs, 2005). De gevolgen van pensionering en het verlaten van het ouderlijk nest door kinderen in relatie tot verhuizingen zijn dan ook een afspiegeling van institutionele en culturele veranderingen in de latere fasen van de levensloop. Variatie in het proces is gerelateerd aan veranderingen in de levensloop en in de traditionele rollen die tot dan toe de norm waren, en dit reflecteert bredere maatschappelijke veranderingen (Thomése et al., 2005). Deze veranderingen leidden tot groei in het aanbod van verschillende soorten woningen en woonmogelijkheden.

De vraagt rijst waarom ouderen zich zo hardnekkig aan hun *vertrouwde huis* blijven vastklampen, met het risico op een woonomgeving die niet meer past bij hun fysieke omstandigheden (Lawton, 1989). Zoals Golant (2011) het treffend verwoordt: ouderen belanden uiteindelijk in woonomstandigheden met gespleten persoonlijkheden. De situatie van het blijven wonen in het vertrouwde huis wordt in onderzoek omschreven als de mogelijkheid van ouderen om in de gemeenschap te blijven wonen met een zekere mate van onafhankelijkheid. Ouderen behouden daardoor autonomie en toegang tot sociale steun van vrienden en familie (Wiles, Leibing, Guberman, Reeve, & Allen, 2012). De kosten voor een zorginstelling worden zodoende vermeden, waardoor het een favoriete optie is van beleidsmakers, maar ook van de ouderen zelf, zoals we al eerder omschreven.

De discussie over het ‘vertrouwde huis’ is het meest relevant voor ouderen met gezondheidsproblemen, omdat zij weinig keuze hebben. De argumenten in deze discussie hebben vaak betrekking op gevoelens van bekendheid en vertrouwdheid, omdat ouderen lang op hun huidige adres hebben gewoond. Het zelfstandig blijven wonen, wordt dan vaak positief benaderd. Wat echter over het hoofd wordt gezien, is dat de sociale omgeving niet altijd positief is. Mensen hebben geregeld een problematische

verhouding met hun buren, vaak veroorzaakt door geluidsoverlast en ruzies (Ross & Mirowsky, 1999; Perkins & Taylor, 1996). Nederlandse buurten verschillen in hoge mate van de Amerikaanse, die in dit soort onderzoeken centraal staan, maar de problematiek is vaak hetzelfde. Hoexum (2011, januari 8) beschreef buren als een soort chronische ziekte waar je niet aan kunt ontkomen, aangezien geneesmiddelen ontbreken. Ten tweede is de sociale omgeving aan verandering onderhevig. Ouder worden en veranderingen in de buurt gaan hand in hand (Deeg & Thomése, 2005). Kinderen, vrienden, kennissen en buren worden ook ouder, ze kunnen ziek worden, of ze verhuizen naar andere delen van het land, en hun plaats wordt ingenomen door anderen. Daardoor kan de achterblijvende oudere uiteindelijk in een vacuüm belanden, met het risico op sociale isolatie, en wanneer de gezondheid verslechtert, op ondervoeding, zoals recent onderzoek liet zien (Schilp et al., 2012). Ten derde kan de zorg die bij gezondheidsproblemen wordt gegeven door de partner of kinderen gepaard gaan met bepaalde problemen. Een partner kan ook gezondheidsproblemen krijgen, en familieleden hebben meestal geen ervaring of vaardigheden om professionele zorg te verlenen. Ofschoon de zorg wordt gegeven met de beste bedoelingen, is het niet gereguleerd en gebeurt het zonder toezicht, waardoor ze ontoereikend kan zijn en van een matige kwaliteit. Dit kan leiden tot een toename van ongelukken in huis, bezoeken aan eerstehulpposten of zelfs ziekenhuisopname (Golant, 2011).

De volgende twee theoretische lijnen hebben betrekking op veranderingen in het netwerk. In *het konvooimodel* van Kahn en Antonucci (1980) is de levensloop bepalend voor veranderingen in persoonlijke eigenschappen (individuele behoeften) en in de situatie (rolveranderingen) (Thomése et al., 2005). Met dit model als uitgangspunt vonden we in hoofdstuk 4 dat er weinig veranderde in de rolnetwerken na een reguliere verhuizing. De relaties met buren die verloren gingen, werden vervangen, en in de relaties met leden van organisaties en collega's veranderde weinig. Het rolnetwerk bleef behoorlijk stabiel. We concludeerden dat het delen van een locatie, zoals een buurt, voor relaties met buren en leden van organisaties na een verhuizing belangrijk is. In onderzoek wordt soms gesuggereerd dat de geografische basis voor relaties betekenis verliest (Van Tilburg & Thomése, 2010). De start van een nieuw netwerk hangt voor een deel samen met een gedeelde locatie, zoals we zagen in hoofdstuk 5, waar factoren gerelateerd aan de buurt een belangrijke rol speelden na een reguliere verhuizing. Logan en Spitze (1994) benadrukken dat jongere ouderen een grotere betrokkenheid bij een buurt hebben dan volwassenen. Zij gaan vriendschappelijke contacten aan en zorgen voor sociale controle in de buurt omdat ze vaker thuis zijn. Ook zijn ze beter in staat om contacten met buren te onderhouden, doordat ze vaker in de gelegenheid zijn om op bezoek te gaan (Ross & Mirowsky, 1999). Het konvooimodel is niet gebruikt om verhuizers naar een verzorgingshuis of verpleeghuis te onderzoeken,

maar is waarschijnlijk ook op hen van toepassing. We vonden weinig veranderingen in de persoonlijke netwerken van deze groep verhuizers. De ontwikkeling van een nieuw netwerk op basis van een gedeelde locatie is mogelijk ook op deze groep van toepassing. Zij delen de dagelijkse gang van zaken met medebewoners, zoals maaltijden en activiteiten, of delen een kamer. Op basis van de resultaten concluderen we dat, ondanks een komen en gaan van relaties, het persoonlijk netwerk van verhuizers vaak in zijn geheel in evenwicht blijft.

De derde theoretische lijn komt voort uit theorieën over het *sociale kapitaal* op individueel niveau (Thomése et al., 2005): mensen investeren om daar later profijt van te hebben. De samenstelling van het persoonlijk netwerk veranderde, maar dit had nauwelijks effect op de omvang ervan. De rolrelaties die verloren gingen, werden grotendeels vervangen door nieuwe relaties. Het proces van komen en gaan van relaties kan mogelijk teruggevoerd worden op overwegingen van kosten en baten, en de beschikbaarheid van alternatieven. Hoe groter de afstand van de verhuizing, hoe meer het kost om relaties in de voormalige buurt in stand te houden. De belangrijkste kosten houden verband met reistijd; met een grote reistijd lopen spontane contactmogelijkheden drastisch terug. De baten door het investeren in nieuwe relaties houden verband met steun en hulp, en het verkrijgen van informatie over de nieuwe buurt. Een vergelijkbaar mechanisme is ook van toepassing op de verhuizers naar zorginstellingen. Vooral wanneer ze in de oude buurt door hun toenemende zorgbehoefte steeds minder contacten overhielden, biedt een zorginstelling mogelijkheden tot het aangaan van gelijkwaardige relaties met medebewoners. In hoofdstuk 3 zagen we dat interacties met medebewoners op de lange duur meer gevoelsmatig zijn, terwijl dat in het begin meer praktisch was, gericht op het verkrijgen van informatie over de dagelijkse gang van zaken. Deze theoretische lijn is een aanvulling op het konvooimodel, omdat beide zich richten op veranderingen in behoeften en omstandigheden van ouderen. Het konvooimodel doet dat op het niveau van het netwerk, waarbij we constateren dat er veel veranderingen in het aantal relaties zijn, terwijl het netwerk in evenwicht blijft. De theorie van het sociale kapitaal kijkt naar veranderingen op het niveau van het individu en voorspelt welke relaties de meeste aandacht krijgen. De twee theoretische lijnen vullen elkaar daarom aan (Thomése et al., 2005).

In dit proefschrift is de volgende onderzoeksvraag beantwoord: *Wat zijn de determinanten van een verhuizing door Nederlandse ouderen en welke sociale gevolgen heeft dit?* We zagen dat ouderen verhuizen na op zichzelf staande levensgebeurtenissen en dat velen weinig moeite hebben zich daarna aan te passen. Daaruit concluderen we dat sommige oude bomen opbloeien nadat ze verplant zijn: een verhuizing is niet sociaal of emotioneel ontwrichtend, en het is daarom niet langer nodig ouderen als slachtoffer van verhuizingen te beschouwen, zoals het gezegde

‘verplant geen oude bomen’ impliceert. Waar eerder in het leven uitdagingen belangrijk zijn (wonen, werk, vakanties), wordt op de oude dag vaak vastgehouden aan wat bekend en vertrouwd is (Wahl et al., 2012). Het ‘vertrouwde huis’ wordt paradoxaal genoeg gerelateerd aan gevoelens van controle, terwijl het juist een verhuizing is die kan zorgen voor sterkere gevoelens van controle en een prettige toekomst. Het nemen van verantwoordelijkheid over het eigen leven door het creëren van een netwerk na een verhuizing en dit in te richten naar eigen behoeften, hoort bij een moderne samenleving.

Op basis van de resultaten suggereren we dat een omslag in het denken over verhuizingen door ouderen wenselijk is. De overheid kan ouderen en hun sociale omgeving voorlichten over alle voor- en nadelen van de situatie van het ‘vertrouwde huis’. Niet alleen de oudste groep moet geïnformeerd worden, maar ook jongere ouderen die nog meer keuzes hebben. Ook kan de overheid onderzoeken of het blijven wonen in het vertrouwde huis goedkoper is dan wonen in een zorginstelling. De kosten zijn niet alleen de subsidies voor alle vormen van hulp en aanpassingen in huis, maar ook de arbeidskosten van zorgverlenende familieleden die een onderbreking van hun carrière hebben en dientengevolge inkomensverlies, het bezoek van artsen aan huis en bezoek aan ziekenhuizen, en achterstallig onderhoud aan de huizen van de hulpbehoevende oudere. Wanneer dit allemaal in kaart is gebracht, kan een oudere een weloverwogen beslissing nemen over wel of niet verhuizen, en de gevolgen ervan overzien. Een voorspoedige oude dag betekent dat ouderen zeggenschap over hun eigen leven hebben en de veranderingen die inherent zijn aan het ouder worden zonder vrees tegemoet zien.

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Darkwood

Omdat ik het vak van onderzoeker goed onder de knie wilde krijgen, ben ik aan dit proefschrift begonnen. Niet direct om te promoveren, wel om me in het wel en wee van ouderen te verdiepen. Het was een lange weg, maar ook een in alle opzichten leerzame en uitdagende weg. Het uiteindelijke resultaat, dit proefschrift, heeft de vorm gekregen zoals ik dat wenste. In al die jaren kreeg ik van veel mensen aandacht en steun. Het voert te ver om iedereen bij naam te noemen, maar voor een aantal mensen wil ik een uitzondering maken. Promotor Theo van Tilburg en copromotor Fleur Thomése zijn al die jaren mijn concepten blijven lezen en voorzien van aanvullingen en leerzame aanwijzingen. Ik vond het bijzonder dat er altijd ruimte was voor inhoudelijke en morele steun, zelfs als het erg druk was, en ook nadat ik de VU allang had verlaten. De gezelligheid van kamergenote Rozemarijn: we deelden letterlijk lief en leed, en ook de liefde voor lekker eten, waardoor we nog steeds naar leuke restaurants gaan. Met Marga en Maurice, samen startten we dit project, waren er de vele lunches en gezellige gesprekken die over van alles en nog wat gingen, maar ook inhoudelijk over onze gedeelde onderwerpen. Maurice is me blijven steunen nadat ik de VU had verlaten en hij gepromoveerd was, en we bellen nog steeds regelmatig. Ik ben heel erg blij met de praktische en morele steun van José. Alle goede gesprekken, niet alleen over de promotie, hielden mij op de been. Ik kijk er met plezier op terug en zijn motto *een goede voorbereiding is het halve werk* heeft gemaakt dat ik dit proefschrift met vertrouwen ga afronden. Een dankwoord is te klein om aan te geven hoe onmisbaar Ed was in dit proces. Onze vrije tijd werd vaak opgeofferd, doordat ik uren achter de computer zat; het begrip daarvoor en het aanhoren van alle wederwaardigheden maakten dat ik dit proefschrift kon voltooien.

Curriculum Vitae

Brigitte Bloem werd geboren op 8 december 1960 te Wormer. Vanaf 1979 studeerde zij *cultureel werk* aan de Sociale Academie te Amsterdam en rondde dit in 1983 af. Van 1984 tot 1991 werkte zij als *consulente* bij de Sociale Dienst in Purmerend. Na een kort uitstapje naar het bedrijfsleven en allerlei tijdelijke functies, ging zij psychologie studeren in Leiden. In 2001 studeerde zij cum laude af in een vrije richting, die bestond uit vakken op het gebied van methoden en technieken, klinische psychologie en functieleer. Tussen 2001 en 2006 was zij werkzaam als promovenda bij de faculteit Sociale Wetenschappen aan de Vrije Universiteit Amsterdam. Vanaf 2007 is zij werkzaam bij het Korps landelijke politiediensten (KLPD) in Zoetermeer als onderzoeker.